For The Long Run®

WOODWAY®

Motorized Sports & Fitness Treadmills

Includes the models:

4Front

Mercury

Path

Pro

Pro XL

Translation of the original German Operating Manual

Version: 03/2021-v2.3en

European Representative:

WOODWAY GmbH
Steinackerstr. 20
79576 Weil am Rhein
Germany

Tel.: +49-7621-940 999-0
Fax.: +49-7621-940 999-40
E-mail: info@woodway.de
Web: www.woodway.de

Sales:

Tel. +49-7621-940 999-10
E-mail: vertrieb@woodway.de

Customer Service:

Tel. +49-7621-940 999-14
E-mail: service@woodway.de

Manufacturer:

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

Tel.: +1-262-548-6235
Fax.: +1-262-522-6235
E-mail: info@woodway.com
Web: www.woodway.com

Table of Contents

1 Introduction 6
1.1 Operating Instruction Information 6
1.2 Limitation of Liability 6
1.3 Copyright 7
1.4 Replacement Parts 7
1.5 Customer Service 8
1.6 EC Declaration of Conformity 9
2 Safety 10
2.1 General 10
2.2 Description of Warning Notices 10
2.3 Safety Notices on Device 11
2.3.1 4Front / Mercury / Path / Pro / Pro XL 11
2.4 Health Risks 13
2.5 Intended Use 14
2.6 Unauthorized Modes of Operation 15
3 Technical Data 16
3.1 Name Plate 16
3.2 RS-232 Interface 16
3.3 Technical Specifications 17
3.3.1 4Front / 4Front with TV 17
3.3.2 Mercury / Mercury H 18
3.3.3 Path / Path H 19
3.3.4 Pro / Pro with TV 20
3.3.5 Pro XL / Pro XL with TV 21
3.4 Running Surface 22
3.5 Conditions for Use 22
3.6 Electrical Connection 23
4 Transportation and Storage 25
4.1 Safety Notices for Transportation 25
4.2 Flat Transportation 25
4.3 Upright Transportation 25
4.4 Transportation with Carrying Poles 26
4.5 Storage 26
5 Product Description 27
5.1 Running Surface 27
5.2 Transport System 27
5.3 Incline System 28
5.4 Dynamic / Braking Mode 29
5.4.1 Dynamic / Braking Mode: LED Standard Display 29
5.4.2 Dynamic / Braking Mode: LED Group Training Display 30
5.4.3 Dynamic / Braking Mode: LCD Personal Trainer Display 31
5.5 Power Console 32
5.6 Safety Equipment 32
5.6.1 Safety Railing 32
5.6.2 Emergency Stop with Pull Cord 33
5.6.3 Belt Drive Current Limiter 33
5.6.4 Low Leakage Current 33
5.6.5 Dismounting in Emergency Situation 33
6 Commissioning 35
6.1 General 35
6.2 Grounding Information 35
6.3 Installation 35

6.3.1 Adjust Leveling Feet....37
6.3.2 Completion of Installation....38
6.4 Assembly Instructions....38
6.4.1 Preparation....38
6.4.2 4Front....39
6.4.3 Mercury, Path....42
6.4.4 Pro, Pro XL....46
6.5 Replacing Parts....48
7 Operation....49
7.1 For Your Safety....49
7.2 Practical Training....50
7.2.1 Professional Consultation....50
7.2.2 Warm-Up and Cool-Down....50
7.2.3 Proper Body Form....50
7.2.4 Measuring Heart Rate....50
7.2.5 Calculating Maximum Heart Rate....50
7.2.6 Heart Rate Chart....51
7.2.7 Training Frequency....51
7.3 Contact Heart Rate Measurement....52
7.4 Heart Rate Monitor....52
7.4.1 Applying the Chest Strap....52
7.4.2 Transmitter Function....53
7.5 Before Each Use....54
7.6 Switching Device On/Off....54
7.7 LED Standard Display....56
7.7.1 Display Parameters....56
7.7.2 Turning the Display ON....56
7.7.3 Training Parameters....57
7.7.4 Description of Display Elements....57
7.8 LED Group Training Display....58
7.8.1 Display Parameters....58
7.8.2 Turning the Display ON....58
7.8.3 Training Parameters....58
7.8.4 Description of Display Elements....59
7.9 LCD Personal Trainer Display....60
7.9.1 Display Parameters and Operating Functions....61
7.9.2 Description of Display Elements....61
7.9.3 Quick Start (User Defined Operation)....62
7.9.4 Quick Start Display Parameter....62
7.9.5 Starting a Training Program....63
7.9.6 Fitness Programs....65
7.9.7 User Programs....76
7.9.8 Fitness Tests....78
7.10 Saving Workouts to USB....84
8 Options....85
8.1 Power Input 208 / 230 V....85
8.2 Body Weight Support Systems....85
8.3 Reverse Mode (Bi-Directional Belt Control)....85
8.4 Top Speeds Upgrade....86
8.5 RS-232 Remote Computer Control....86
8.6 TV Programming, 4Front/Pro/Pro-XL....87
8.7 ProSmart Touchscreen, 4Front/Pro/Pro-XL....91
8.8 Accessories and Services....92

9 Cleaning and Maintenance 93
9.1 Cleaning 93
9.2 Maintenance Intervals 94
9.2.1 Weekly Maintenance 94
9.2.2 Monthly Maintenance 94
9.2.3 Semi-Annual Maintenance 95
9.2.4 Annual Maintenance 96
9.3 Lubrication 97
9.3.1 Bearings 97
9.3.2 Running Surface Belt, Drive Axle 97
9.3.3 Drive Belt 98
9.3.4 Incline System 98
9.4 Adjusting and Calibrating 99
9.4.1 Incline System 99
9.4.2 Handrails 99
9.4.3 Bearing Rails 99
9.4.4 Treadmill Support Feet 99
9.4.5 Running Surface Belt 99
9.4.6 Calibrating Belt 100
9.5 Disabling the Treadmill 101
9.5.1 Labels for Disabling a Treadmill 102
9.6 Device Fuses 103
10 Troubleshooting 104
10.1 Unusual Noises 104
10.2 No Display 104
10.3 Running Surface Does Not Move 105
10.4 Free Moving Running Surface 105
10.5 Incline Does Not Function 105
10.6 Irregular or Flashing Display 105
10.7 Electrostatic Discharge 105
10.8 Sources of Electromagnetic Interference 105
10.9 Interference of the POLAR® Heart Rate Monitor 106
11 Disposal Notice 107
12 Maintenance Report 108
13 Table of Figures 109

1 Introduction

1.1 Operating Instruction Information

This manual provides information on the safe operation of the treadmill.

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

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.

⚠ CAUTION

Improper operation can cause accidents!

Not using the 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.

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.

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

1.3 Copyright

The release of the operating instructions to third parties without the written permission by 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.

1.4 Replacement Parts

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

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

NOTE

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

DISPOSAL! Wear parts are considered hazardous waste!

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

For further information on disposal, see sec. 11 page 107.

1.5 Customer Service

For service questions contact the following:

WOODWAY GmbH
Steinackerstr. 20
79576 Weil am Rhein
Germany

Contact: Tel. +49 (0) 7621-940999-14
Fax. +49 (0) 7621-940999-40
E-mail: service@woodway.de
Web: www.woodway.de

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

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

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

⚠ 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.

1.6 EC Declaration of Conformity

CE

WOODWAY
For The Long Run®

EC Declaration of Conformity
EG Konformitätserklärung

Manufacturer: ***Hersteller:***	WOODWAY USA Inc.
Address: ***Adresse:***	W234 N700 Busse Rd. Waukesha, Wisconsin 53188 USA Phone: +1 262-548-6235 E-Mail: info@woodway.com Web: http://www.woodway.com

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

Directive 2001/95/EC (General product safety)	*Richtlinie 2001/95/EG (allgemeine Produktsicherheit)*
Directive 2006/42/EC (Machinery)	*Richtlinie 2006/42/EC (Maschinenrichtlinie)*
Directive 2011/65/EU (RoHS)	*Richtlinie 2011/65/EU (RoHS)*
Directive 2014/30/EU (EMC)	*Richtlinie 2014/30/EU (EMC)*

Product designation: *Produktbezeichnung:*	Motorized Sports & Fitness Treadmills *Motorisierte Sports & Fitness Lamellenlaufbänder*
Product type: *Typenbezeichnung:*	Mercury, Mercury H, Path, Path H, Pro, Pro XL, 4 Front
Used standards: *Angewandte Normen:*	EN 957-6:2010+A1:2014 (Class A, S, I) EN 60335-1:2010 EN 61000-6-2:2005 EN 61000-6-3:2007 + A1:2011 EN ISO 12100:2010 EN ISO 20957-1:2013

The declaration of conformity is valid for all the models listed above, which were produced on after 05 August 2019 by WOODWAY USA Inc. The validity of this declaration of conformity ends with the publication of a new declaration of conformity if this becomes necessary due to technical modifications or changes in the standards.
Die Konformitätserklärung gilt für alle oben gelisteten Modelle, die ab dem 05 August 2019 durch WOODWAY USA Inc. hergestellt worden sind. Die Gültigkeit dieser Konformitätserklärung endet mit der Veröffentlichung einer Konformitätserklärung neueren Datums, falls dies durch technische Änderungen oder durch gesetzliche Änderungen der Normen und Standards erfolgen muss.

Waukesha, USA
August 5th 2019

Douglas Bayerlein
Präsident / President WOODWAY USA, Inc.

Fig. 1 EC Declaration of Conformity

2 Safety

2.1 General

The treadmills have been designed, manufactured and tested according to the latest state of technology and are in safe and technically optimal conditions. Nevertheless, the device can cause risk to persons and property if it is operated improperly.

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

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

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

2.2 Description of Warning Notices

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

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

Sample of a Warning Notice:

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

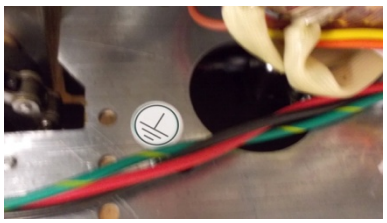
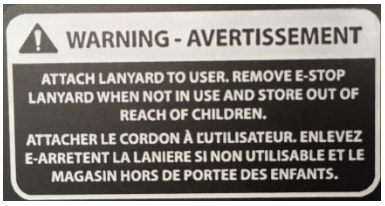
Classification:

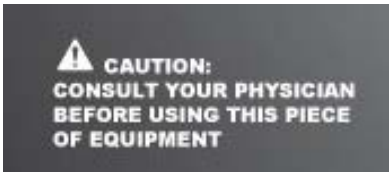
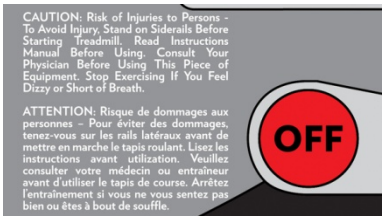
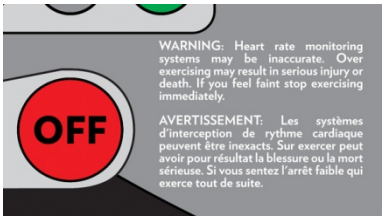
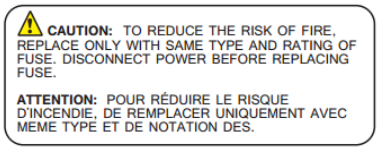
NOTE	NOTE or WARNING (no danger symbol) No risk of injury, pertinent information and warning against material damage.
⚠ CAUTION	CAUTION (with danger symbol) Slight possibility of injury.
⚠ WARNING	WARNING (with danger symbol) In a dangerous situation a serious accident is possible with the possibility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

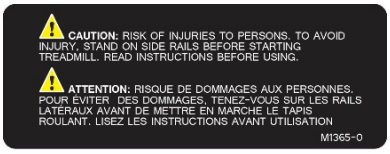
2.3 Safety Notices on Device

The treadmills are equipped with the following listed safety markings. Replace the safety stickers if they become damaged or illegible. Safety relevant information is identified using the following stickers:

2.3.1 4Front / Mercury / Path / Pro / Pro XL

	**Protective Ground Wire Connection** Motorized treadmills are electric devices in protection class I. Proper ground wire connection must be ensured. This notice is located inside the housing of the treadmill.
	**Warning EMERGENCY OFF Magnet!** If the device is not in use, the EMERGENCY OFF magnet with safety line and clip are to be stored out of the reach of children.
	**Notice on EMERGENCY OFF Magnet!** Information Sign on mounting the EMERGENCY OFF magnets and for securing the safety line to the user. *Mercury / Path / Pro / Pro XL
	**Notice on EMERGENCY OFF Magnet** Information sign on attaching the safety cord to the user, as well as for storing the EMERGENCY STOP magnet with the safety cord and clip out of the reach of children when not in use. *4Front
	**Notice on EMERGENCY OFF Magnet** This is an information sign on mounting the EMERGENCY OFF magnets and for securing the safety line to the user. *Mercury / Path

	**Notice on Display PTB/STD Left Side!** Consult your physician or trainer before using the treadmill. *Mercury / Path / Pro / Pro XL
	**Notice on Display PTB/STD Right Side!** Stop training if you do not feel well or are out of breath. *Mercury / Path / Pro / Pro XL
	**Notice on Display 4Front Left Side!** To prevent injury, stand on the side panels prior to starting the device. Read the operating instructions prior to use. Consult your trainer/therapist prior to use. Stop training immediately if you feel dizzy or exhausted.
	**Notice on Display 4Front Right Side!** The heart rate indicator is exact (if used). Overstraining can lead to serious injury or death. Stop training immediately as soon as you feel exhausted.
	**Safety Notice for Fuse Change** To prevent fire hazard, only replace fuses with the same type and power fuses. Remove the device from the mains before changing. This notice is located near the fuse inside the body of the treadmill.
	**Warning to Not Tension Belt** To prevent incorrectly tensioning running belt and causing damage or injury, call WOODWAY Service for proper instruction or to set up an appointment with a service technician. This is located just inside the treadmill side covers.
	**Warning on Power Cord** To reduce the risk of injury from moving parts, unplug the treadmill before servic-ing. Use time-delay fuses if applicable.

	**Notice on Bottle Holder** To prevent injury, stand on the side panels prior to starting the device. Read the operating instructions prior to use. *Mercury / Path

2.4 Health Risks

⚠ WARNING

Health Hazards for Certain Groups of People!

The use of the treadmill can pose health risks for certain people.

► Before using the device, check the list below for limitations for certain persons which apply to you. If so, the specified measures must be adhered to.

Persons with Medical Conditions

Before beginning an exercise program, consult your physician, especially if any of the following apply to you:

- History of heart disease
- High blood pressure
- Diabetes
- Chronic respiratory illness
- Elevated cholesterol levels
- Smoker
- Other chronic illnesses or physical impairments

Pregnancy

Pregnant women must consult a physician before starting a training program.

Symptoms During Training

Should you experience dizziness, chest pain, nausea, or any other abnormal symptoms while training on the treadmill, stop training immediately. Consult a physician prior to continuing training.

2.5 Intended Use

⚠ WARNING

Danger from Improper Use!

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

- ► Only use the treadmill for its intended use.
- ► Avoid excessive training, as this can lead to injury.
- ► Read and strictly adhere to all information in the operating instructions.

All listed treadmill types are motorized. They serve to train athletic running training to increase stamina, physical fitness and can be used for running or walking. Please note that all treadmills that are listed in this manual are athletic training equipment, which according to EU regulations are not to be used for medical applications.

The operating instructions are an integral part of the treadmill and are to be available to all users at all times. The exact observance of the instructions is a prerequisite for the intended use of the WOODWAY treadmill.

⚠ WARNING

Risk of Injury Through Risk of Falling!

The motorized treadmill presents the danger of falling.

- ► Familiarize yourself with treadmill operation and operating principles before the first training.
- ► Before using the treadmill, the user must familiarize themselves with the operation of the device, especially with the drive functions!

ATTENTION

Claims to the manufacturer of any kind due to damage from improper use are excluded.

The representative alone is liable for all damages resulting from improper use!

2.6 Unauthorized Modes of Operation

⚠ WARNING

Unauthorized Use Can Cause Injury!

Using the treadmill in a manner not authorized by WOODWAY can be potentially hazardous.

- ► Only use the device for its intended use as described in the manual.
- ► Do not use unauthorized replacement parts or accessories that could interfere with the functionality or safety of the device.
- ► Always use the safety handrail when mounting and dismounting and when starting training.
- ► If the device is damaged or not functioning properly, do not use until it has been inspected and/or repaired by qualified and authorized personnel.

The treadmill may only be used for the aforementioned intended use. 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.
- Children may not use the device or be left near the device unattended.
- The use of the treadmill under the influence of alcohol or drugs and/or narcotics is prohibited.
- The treadmill may not be used for animals.
- The treadmill is not intended to be used by persons weighing more than 360kg when walking at speeds up to 6.4km/h, or more than 180kg when running at speeds exceeding 6.4km/h.
- 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 motorized treadmills outside of the named ambient conditions in the section "Commissioning" (temperature, humidity, air pressure) as well as outdoors, i.e. outside of closed rooms is not allowed.
- For people with health limitations or contraindications (see previous section) the use of a treadmill without prior consultation by a health care professional is prohibited.
- When stepping onto the treadmill, during walking exercises and when stepping off of the treadmill the safety instructions in this manual must be observed. Here, the following restrictions apply:
  - o Never jump onto the moving belt!
  - o Never jump off while the device is moving!
  - o Never jump off of the front!
  - o Never stop walking when the belt is moving!
  - o Never turn around when the belt is moving!
  - o Never walk sideways or backwards!
  - o Never set the stress level (speed) too high!

3 Technical Data

3.1 Name Plate

Each WOODWAY treadmill receives a serial number during production. Depending on the year of your model, it has an alphanumeric code with 7-8 characters or a numeric code with 9 digits. The serial number can be found on the name plate, which is mounted on the rear of the display or on the left front of the treadmill frame.

The nameplate contains the device's main technical details. The treadmill range of functions is stated the nameplate and on the delivery note.

Keep Handy for Questions!

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

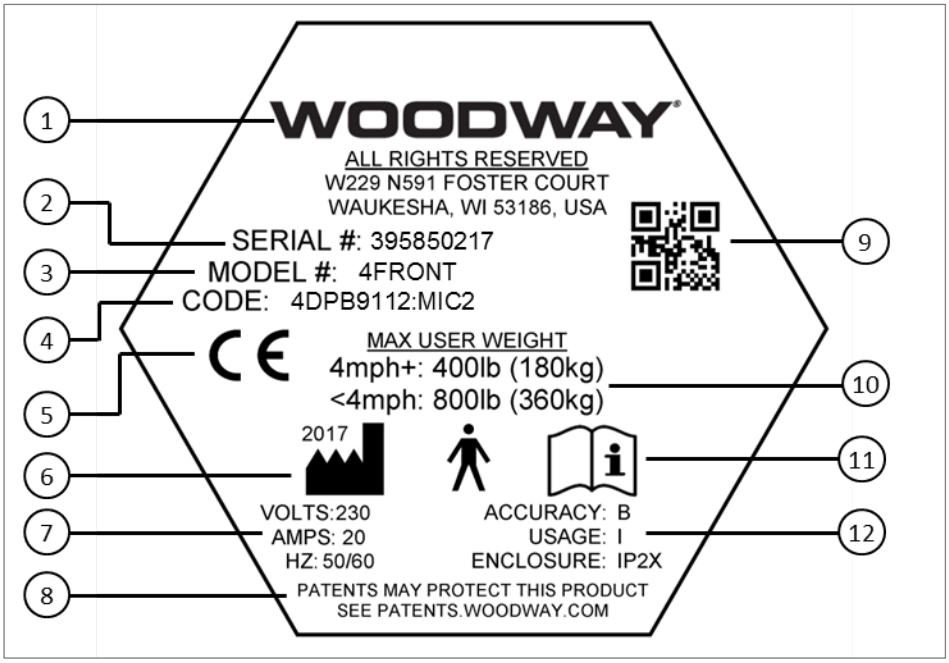


Fig. 2 Example of 4Front Name Plate

1. Manufacturer name, address, and logo
2. Serial no.
3. Model no.
4. Product code
5. Device CE symbol
6. Year manufactured
7. Information on electrical connection
8. Patent protection note
9. Quick Response (QR) code
10. Max. user weight load
11. Note to read and observe operating instructions.
12. Usage class, accuracy class, and enclosure rating

3.2 RS-232 Interface

With this option you can switch between the treadmill display and a remote computer for the purpose of remote control. The receptive programs are available. Ask your salesperson for details.

3.3 Technical Specifications

3.3.1 4Front / 4Front with TV

Figure: 4Front with TV

Figure: 4Front dimensions

Additional options may be available.
Please contact your sales representative.

4Front

- Running Usable Surface (A x B): 157 x 55cm
- Footprint: 173 x 55cm
- Overall dimensions (W x L x H): 89 x 183 x 163 cm
- Weight: 201 kg
- Speed: 0 – 20 km/h
- Incline: 0 – (+15) %
- LED Group Training Display (see sec. 7.8 page 58)

Options:

- Higher speeds up to 25 km/h
- Steeper incline up to 25 %
- Incline (-3) – (+22) %
- LCD Personal Trainer Display (see sec. 7.9 page 60)
- 10.1" ProSmart Touchscreen (see sec. 8.7 page 91)
- 21" ProSmart Touchscreen (see sec. 8.7 page 91)
- Interface RS232 incl. control software
- Custom Color
- Floor Protection Mat
- Fall Protection System with Harness
- Reverse Mode (only in combination with the Fall Protection System)

4Front with TV

- Running Usable Surface (A x B): 157 x 55 cm
- Footprint: 173 x 55 cm
- Overall dimensions (W x L x H): 89 x 193 x 188 cm
- Weight: 201 kg
- Speed: 0 – 20 km/h
- Incline: 0 – (+15) %
- LED Group Training Display (see sec. 7.8 page 58)
- 19" (48 cm) LCD TV with Dual Tuner

Options:

- Higher speeds up to 25 km/h
- Steeper incline up to 25 %
- Incline (-3) – (+22) %
- LCD Personal Trainer Display (see sec. 7.9 page 60)
- Interface RS232 incl. control software
- Custom Color
- Floor Protection Mat
- Fall Protection System with Harness
- Reverse Mode (only in combination with the Fall Protection System)

3.3.2 Mercury / Mercury H

Figure: Mercury

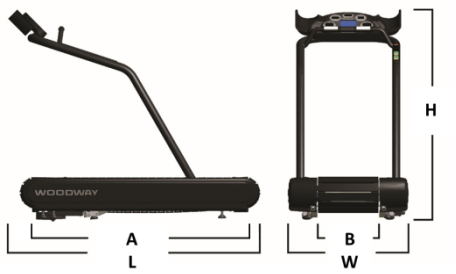


Figure: Mercury Dimensions

Additional options may be available.
Please contact your sales representative.

Mercury

- Running Usable Surface (A x B): 157 x 43 cm
- Footprint: 173 x 43 cm
- Overall dimensions (W x L x H): 86 x 180 x 152 cm
- Weight: 184 kg
- Speed: 0 – 20 km/h
- Incline: 0 – (+15) %
- LED Standard Display (see sec. 7.7 page 56)

Options:

- Steeper incline up to 25%
- Incline (-3) – (+22) %
- Interface RS232 incl. control software
- Custom Color
- Floor Protection Mat

Mercury H

- Running Usable Surface (A x B): 157 x 43 cm
- Footprint: 173 x 43 cm
- Overall dimensions (W x L x H): 86 x 180 x 152 cm.
- Weight: 184 kg
- Speed: 0 – 20 km/h
- Incline: 0 – (+15) %
- LCD Personal Trainer Display (see sec. 7.9 page 60)

Options:

- Steeper incline up to 25%
- Incline (-3) – (+22) %
- Interface RS232 incl. control software
- Custom Color
- Floor Protection Mat

3.3.3 Path / Path H

Figure: Path

Figure: Path Dimensions

Additional options may be available.
Please contact your sales representative.

Path

- Running Usable Surface (A x B): 120 x 55 cm
- Footprint: 132 x 55 cm
- Overall dimensions (W x L x H): 97 x 150 x 152 cm
- Weight: 168 kg
- Speed: 0 – 20 km/h
- Incline: 0 – (+15) %
- LED Standard Display (see sec. 7.7 page 56)

Options:

- Interface RS232 incl. control software.
- Custom Color
- Floor Protection Mat

Path H

- Running Usable Surface (A x B): 120 x 55 cm
- Footprint: 132 x 55 cm
- Overall dimensions (W x L x H): 97 x 150 x 152 cm
- Weight: 168 kg
- Speed: 0 – 20 km/h
- Incline: 0 – (+15) %
- LCD Personal Trainer Display (see sec. 7.9 page 60)

Options:

- Interface RS232 incl. control software.
- Custom Color
- Floor Protection Mat

3.3.4 Pro / Pro with TV

Figure: Pro

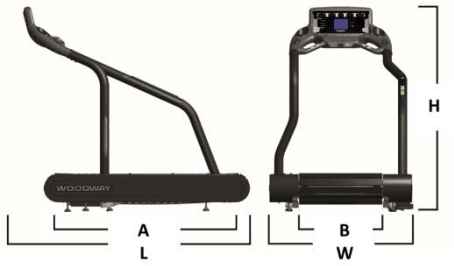


Figure: Pro Dimensions

Additional options may be available.
Please contact your sales representative.

Pro

- Running Usable Surface (A x B): 157 x 70 cm
- Footprint: 173 x 70 cm
- Overall dimensions (W x L x H): 122 x 193 x 173 cm
- Weight: 261 kg
- Speed: 0 – 25 km/h
- Incline: 0 – (+25) %
- LED Group Training Display (see sec. 7.8 page 58)

Options:

- Incline (-3) – (+22) %
- LCD Personal Trainer Display (see sec. 7.9 page 60)
- 10.1” ProSmart Touchscreen (see sec. 8.7 page 91)
- 21” ProSmart Touchscreen (see sec. 8.7 page 91)
- Interface RS232 incl. control software
- Jump Plate
- Custom Color
- Floor Protection Mat
- Fall Protection System with Harness
- Reverse Mode (only in combination with the Fall Protection System)

Pro with TV

- Running Usable Surface (A x B): 157 x 70 cm
- Footprint: 173 x 70 cm
- Overall dimensions (W x L x H): 122 x 203 x 198 cm
- Weight: 261 kg
- Speed: 0 – 25 km/h
- Incline: 0 – (+25) %
- LED Group Training Display (see sec. 7.8 page 58)
- 19’’ (48 cm) LCD TV with Dual Tuner

Options:

- Incline (-3) – (+22) %
- LCD Personal Trainer Display (see sec. 7.9 page 60)
- Interface RS232 incl. control software
- Jump Plate
- Custom Color
- Floor Protection Mat
- Fall Protection System with Harness
- Reverse Mode (only in combination with the Fall Protection System)

3.3.5 Pro XL / Pro XL with TV

Figure: Pro XL

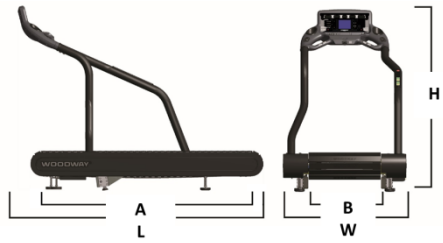


Figure: Pro XL Dimensions

Additional options may be available.
Please contact your sales representative.

Pro XL

- Running Usable Surface (A x B): 200 x 70 cm
- Footprint: 224 x 70 cm
- Overall dimensions (W x L x H): 122 x 239 x 178 cm
- Weight: 307 kg
- Speed: 0 – 25 km/h
- Incline: 0 – (+25) %
- LED Group Training Display (see sec. 7.8 page 58)

Options:

- Incline (-3) – (+22) %
- LCD Personal Trainer Display (see sec. 7.9 page 60)
- 10.1” ProSmart Touchscreen (see sec. 8.7 page 91)
- 21” ProSmart Touchscreen (see sec. 8.7 page 91)
- Interface RS232 incl. control software
- Jump Plate
- Custom Color
- Floor Protection Mat
- Fall Protection System with Harness
- Reverse Mode (only in combination with the Fall Protection System)

Pro XL with TV

- Running Usable Surface (A x B): 200 x 70 cm
- Footprint: 224 x 70 cm
- Overall dimensions (W x L x H): 122 x 249 x 203 cm
- Weight: 307 kg
- Speed: 0 – 25 km/h
- Incline: 0 – (+25) %
- LED Group Training Display (see sec. 7.8 page 58)
- 19” (48 cm) LCD TV with Dual Tuner

Options:

- Incline (-3) – (+22) %
- LCD Personal Trainer Display (see sec. 7.9 page 60)
- Interface RS232 incl. control software
- Jump Plate
- Custom Color
- Floor Protection Mat
- Fall Protection System with Harness
- Reverse Mode (only in combination with the Fall Protection System)

3.4 Running Surface

The technical treadmill information is valid for all Sport & Fitness motorized treadmills.

Description:	Parameters:
Setup	Slats, overlapping, exchangeable
Slat type	Rubber on an aluminum core
Slats in treadmill	4Front / Mercury / Pro = 60 Path = 47 Pro XL = 77
Hardness of the running surface	43-47 shore A
Running surface	see respective treadmill type
Standard color	Black
Drive system	4Front / Mercury / Pro = 114 ball bearings, 12 guide rollers Path = 80 bearings, 8 rollers Pro XL = 160 bearings, 18 rollers
Lateral movement	+/- 4 mm

3.5 Conditions for Use

Description:	Parameters:
Ambient temperature	+10°C to +50°C
Relative humidity	20 - 95% (not condensed)
Fuse type	IP2x

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.

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 the plug does not fit, reverse the plug. If other power cord plugs are required, please contact your sales representative.

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.

No other treadmills or devices may be operated on the same supply line. Each treadmill must be operated with its own circuit breaker. The treadmill must be grounded.

⚠ 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 (e.g. 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.

Description:	Parameters:	
Voltage	208 / 230 V AC	
Frequency	50/60 Hz	
Mains Fuse	16 Amps type C ("slow") Dedicated line required.	
Treadmill Fuse	5mm x 20mm – T 10 Amps 250 V 5mm x 20mm – T 16 Amps 250 V (Pro / Pro XL)	
Electrical Wall Socket Requirements	Country-specific **Note**: Power cord plug must be compatible with electrical wall socket. Adapters should not be used.	
Power Cord Plug (standard)	Schuko Power Cord Plug 	
Power cord plug can be adapted upon request	Swiss Power Cord Plug 	UK Power Cord Plug 

If the socket has a voltage of 230 volts and more than one main unit is on the direct line or in neutral conductor and the voltage drops to a minimum of less than 10% of 230 Volts the treadmill will switch off and be reset.

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 or Falling Over!

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

- ► Only transport in compliance with the safety regulations.
- ► Only use the supplied carrying tubes for transport.
- ► Never lift the device using the railing or protective coverings.
- ► Ensure stable center of gravity and steadiness during transportation.

WOODWAY Service: If necessary, 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 of **four** flat transport dollies (commercial transport dollies with 4 steerable wheels). The 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 (for example, narrow door width or for climbing stairs). For this handrails and side panels must be removed.

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

ATTENTION

The treadmill must not rest on the side on which the power cord is connected!

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 (Fig. 3 and Fig. 4).

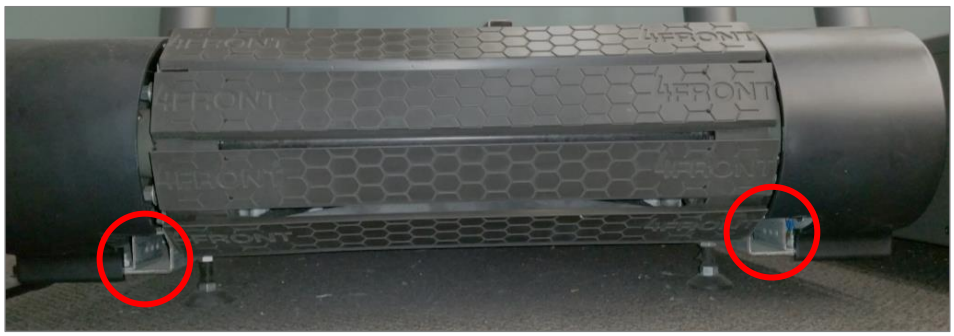


Fig. 3 Ports to insert carrying poles

Fig. 4 Carrying poles

The treadmill may only be lifted at the indicated points.

4.5 Storage

The device may only be stored in closed, dry rooms. It is absolutely necessary to prevent contact with moisture (rain, fog, etc.)

The following environmental conditions are prescribed for transportation and storage:

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

5 Product Description

⚠ WARNING

Risk of Injury Through Falling!

During training, especially during the initial use of the device there is a danger of injury from falling.

- ► Familiarize yourself with treadmill operation before the first training.
- ► It is absolutely necessary that you hold on to the safety railing during the first training program until you can move safely on the treadmill.

5.1 Running Surface

The walking surface belt consists of individual slats which are mounted on a set of wedged-toothed belts.

Slat Design

The individual slats consist of two components: A rubber surface and a T-shaped aluminum base. Due to the approximately 1 cm thick rubber surface and the aluminum T-slat, WOODWAY devices have the "world's most ideal running surface for treadmills". Due to the rubber running surface the majority of the impact energy is absorbed and local pain in extremities which is associated with long runs is reduced. The interaction between the belt system and the transport system prevents friction and heat generation. This increases service life of the running belt and the entire treadmill.

The WOODWAY running surface differs fundamentally from running belts on conventional treadmills (for which cotton-nylon belts are normally used). On your WOODWAY treadmill you may initially notice higher surface grip than you have experienced before. The more you use your treadmill, the more you will get used to the grip. As with all treadmills, it is also important on a WOODWAY treadmill not to shuffle your feet if possible.

5.2 Transport System

Carrier Rails

The carrier system consists of two support rail units, with steel wire reinforced endless side belts and guide rollers with toothed rings and a diameter of about 18 cm. The carrier rails support the running surface and are essential for the reduction of wear and friction of the belts.

Endless Side Belts

The two endless side belts fill several important functions: They hold the individual slats together, transfer the force between the drive and the runner and prevent the running surface from slipping to the left or right. The two carrier rails consist of three main parts: The carrier rail, the individual bearings and the roller guides. The smooth portion of the side belts runs along the bearings and roller guides.

Load Distribution

The carrier rail supports all bearings and guide rollers and distributes the load evenly on the running surface. The guide rollers on each side prevent tracking errors and support the running surface belt. The individual bearings on either side also distribute the load over the entire running surface.

The toothed rollers serve to transfer the load to and from the motor and to prevent the running surface from slipping. The forward roller unit has an additional toothed pulley, which is used for the motor. The rollers have high load-bearing blocks, which also reduce friction.

The transport system design provides for almost no friction.

5.3 Incline System

WOODWAY treadmills are equipped with a standard elevation system up to 15% (with variations between -3 and +22%, and between 0 and +25%). The elevation system is controlled driven by a geared motor and a chain drive system which is used to transmit forces to several drive sprockets. This gear drive raises or lowers the treadmill on toothed racks. The toothed racks are equipped with rubber feet and bear most of the weight of the treadmill and the person when the incline is used.

Limit Switches

Limit switches are used to limit the lifting system. When the display is switched on the running surface is automatically moved to the 0 incline position (starting position).

⚠ WARNING

Danger of Device Moving Down when Switched on!

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

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

5.4 Dynamic / Braking Mode

The treadmill makes it possible that the user serves as the running surface belt drive. The user drives the running surface belt manually during training. This is known as "dynamic / braking mode".

⚠ WARNING

Do Not Leave Treadmill Unattended While in Dynamic / Braking Mode!

In the dynamic / braking mode, the level of resistance in which the treadmill running surface runs can be regulated from 0 to 20. When set at 0, the running surface runs completely free in both directions. There is a danger of injury!

NOTE

The dynamic / braking mode is a standard function on the 4Front, Pro and Pro XL models produced from June 2018. Units produced prior to this date have integrated only the “dynamic mode” function in which the treadmill running surface runs completely free in both directions and its resistance cannot be regulated. To integrate the “dynamic / braking mode” function to an old unit or a different treadmill model, please contact your sales representative.

5.4.1 Dynamic / Braking Mode: LED Standard Display

To use dynamic / braking mode, proceed as follows.

- Stop the running surface belt and reduce INCLINE to zero.
- Press the FAST and SLOW keys simultaneously for about five seconds.
- The display emits a signal tone every second.
- Afterwards two short tones will sound.
- The speed indicator display starts blinking.

Now the treadmill is set to dynamic / braking mode. The running surface belt is now manually driven and its resistance can be regulated from 0 to 20 by using the FAST and SLOW keys. The speed is still indicated and the incline also functions.

To leave dynamic / braking mode, proceed as follows.

- Press the FAST and SLOW keys simultaneously again for about five seconds.
- The display emits a signal tone every second.
- Afterwards two short tones will sound.
- The speed indicator display stops blinking.

Dynamic / braking mode is now deactivated. The running surface belt is now motor driven.

Alternatively, the treadmill can be switched off by pressing the OFF key. When the device is switched back on it will automatically be in normal operating mode and dynamic / braking mode will be deactivated.

5.4.2 Dynamic / Braking Mode: LED Group Training Display

To use dynamic / braking mode, proceed as follows.

- Stop the running surface belt and reduce INCLINE to zero.
- Press the DYNAMIC/BRAKING MODE key for about five seconds.
- The display emits a signal tone every second.
- Afterwards two short tones will sound.
- The speed indicator display starts blinking.

Now the treadmill is set to dynamic / braking mode. The running surface belt is now manually driven and its resistance can be regulated from 0 to 20 by using the FAST and SLOW keys. The speed is still indicated and the incline also functions.

To leave dynamic / braking mode, proceed as follows.

- Press the DYNAMIC/BRAKING MODE key again for about five seconds.
- The display emits a signal tone every second.
- Afterwards two short tones will sound.
- The speed indicator display stops blinking.

Dynamic / braking mode is now deactivated. The running surface belt is now motor driven.

Alternatively, the treadmill can be switched off by pressing the OFF key. When the device is switched back on it will automatically be in normal operating mode and dynamic / braking mode will be deactivated.

NOTE
Depending on the date of production, the button DYNAMIC MODE is equivalent to the button DYNAMIC/BRAKING MODE.

5.4.3 Dynamic / Braking Mode: LCD Personal Trainer Display

The dynamic / braking mode can be entered by the main screen:

- Quick Start
- Manual Mode with weight input
- Fitness Programs
- Fitness Tests
- Dynamic /Braking Mode ←

Alternatively, proceed as follows.

- Stop the running surface belt and reduce INCLINE to zero.
- Press the FAST and SLOW keys simultaneously.
- The display emits 3 fast tones after one second.
- Continue pressing the FAST and SLOW keys about five seconds.
- Afterwards one long tone will sound.
- The center LCD display shows “Dynamic / Braking Mode”

Now the treadmill is set to dynamic / braking mode. The running surface belt is now manually driven and its resistance can be regulated from 0 to 20 by using the FAST and SLOW keys. The speed is still indicated and the incline also functions.

To leave dynamic / braking mode, proceed as follows.

- Press the FAST and SLOW keys simultaneously again.
- The display emits 3 fast tones after one second.
- Continue pressing the FAST and SLOW keys about five seconds.
- Afterwards one long tone will sound.
- The center LCD display stops showing “Dynamic / Braking Mode”

Dynamic / braking mode is now deactivated. The running surface belt is now motor driven.

Alternatively, the treadmill can be switched off by pressing the OFF key. When the device is switched back on it will automatically be in normal operating mode and dynamic / braking mode will be deactivated.

5.5 Power Console

The F connector, the fuses, the main power switch and the power cord are located on the power console.

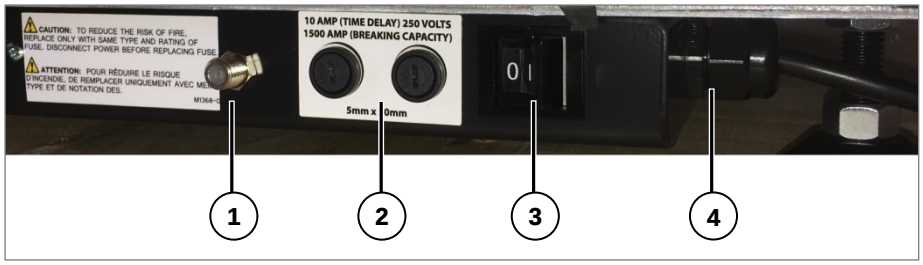


Fig. 5 Power console

1. F connector double coupling (4Front , Pro und Pro XL with TV or ProSmart)
2. 2 x fuses (to change, see sec. 9.6 page 103)
3. Power switch
4. Power cord

5.6 Safety Equipment

The WOODWAY 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.

⚠ WARNING

Dangerous situations during operation which can cause injury!

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

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

5.6.1 Safety Railing

The treadmill is equipped with a railing that extends along both sides and is bowed around the front. This allows the user to maintain direct contact, so as to obtain safety and stability during training.

For safety reasons, the user should hold on to the railing when necessary.

⚠ CAUTION

Risk of Injury Through Risk of Falling!

It is recommended to use the railing for mounting and dismounting!

5.6.2 Emergency Stop with Pull Cord

The emergency stop with pull cord is used to activate the treadmill. If the stop switch magnet is not fixed to the front display panel or not properly positioned, the treadmill cannot be put into operation.

⚠ WARNING

Danger of injury due to improperly installed pull cord!

If the pull cord clip is not fixed 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 (e.g. the waistband) 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.

This safety feature serves to protect the user should they lose their balance or in an emergency. The plastic clip is to be fixed to the waistband when the treadmill is used. When the magnet (trigger) is removed, the drive motor is switched off and the running surface stops. The running surface cannot stop immediately when running at high speeds, since the weight of the running surface needs to be decelerated and there is excess residual energy due to the fast movement.

The safety magnet can also be used to stop the treadmill. 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. Then the treadmill cannot be put into operation.

5.6.3 Belt Drive Current Limiter

The treadmills have a current limiting function to reduce power consumption and to increase safety. The main function is a current limit timeout. If the running surface belt remains stationary for more than 10 seconds (remains in the current limit), the motor drive is switched off and the belt can be moved manually (turns freely). This function is very helpful if something gets caught in the tread belt. In this way the treadmill can be stopped.

If the running surface belt is in current limit mode, the treadmill must be to be switched off with the main switch for at least 60 seconds so that it can be reset. Only then can it be switched on again.

5.6.4 Low Leakage Current

The requirement for low leakage current is important for medical clinics, physical therapy facilities and hospitals.

The treadmill functions are designed so that the power plug and input power transformer are subjected to low leakage current. With an input power transformer with low leakage current, the leakage treadmill current can be reduced to less than 100 micro-amps (uA).

5.6.5 Dismounting in Emergency Situation

The 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.

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. The STOP button or emergency stop button may then be used to bring the running belt to a 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.

ATTENTION

It is expressly pointed out that the Motorized Sport & Fitness treadmills are not approved for medical applications!

6 Commissioning

6.1 General

Commissioning is the initial intended use of the device, see sec.. 2.5 page 14. Ensure that the conditions applicable to basic safety and health requirements are met. Read these operating instructions completely before setting up.

Before installing the device, operating and functional safety is to be tested. This includes correct installation and operator instruction.

In most cases, the WOODWAY treadmill is delivered completely assembled. Check immediately upon delivery for any signs of transportation damage and immediately report any damages to the transport company and WOODWAY.

Position the treadmill to ensure that the power cord can easily be accessed and disconnected when needed. Make sure it is not bent or angled such that it could disconnect.

6.2 Grounding Information

The treadmill must be 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. This 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

Upon Arrival

It is recommended that transport, installation, and assembly of the treadmill must be 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.

Stable Surface

Only install your treadmill at ground level on a sufficiently firm, stable surface. The surface should be as flat as possible to ensure that the frame only bends minimally. Do not place the treadmill directly on deep pile velour or fleece carpet due to moving parts on the bottom.

Weight Consideration

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. The structure of the building must be checked in advance.

The total weight of the device (with all the accessories and options) is to be considered. With larger 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.

Floor Protection

If the installation site has high-pile carpeting, a floor protection mat should be placed under the treadmill. Using a floor protection mat reduces the production of lint which can enter the treadmill. This also minimizes carpet wear.

WOODWAY has appropriate mats available. For more information call WOODWAY Customer Service (see sec. 1.5 page 8).

ATTENTION

Maintain the Safety Area!

Keep the area around the treadmill clear, see Fig. 6.

Ensure that there is a clearance of at least 2m between the back of the treadmill and walls or furniture. Sloping ceilings may not extend into this safety area!

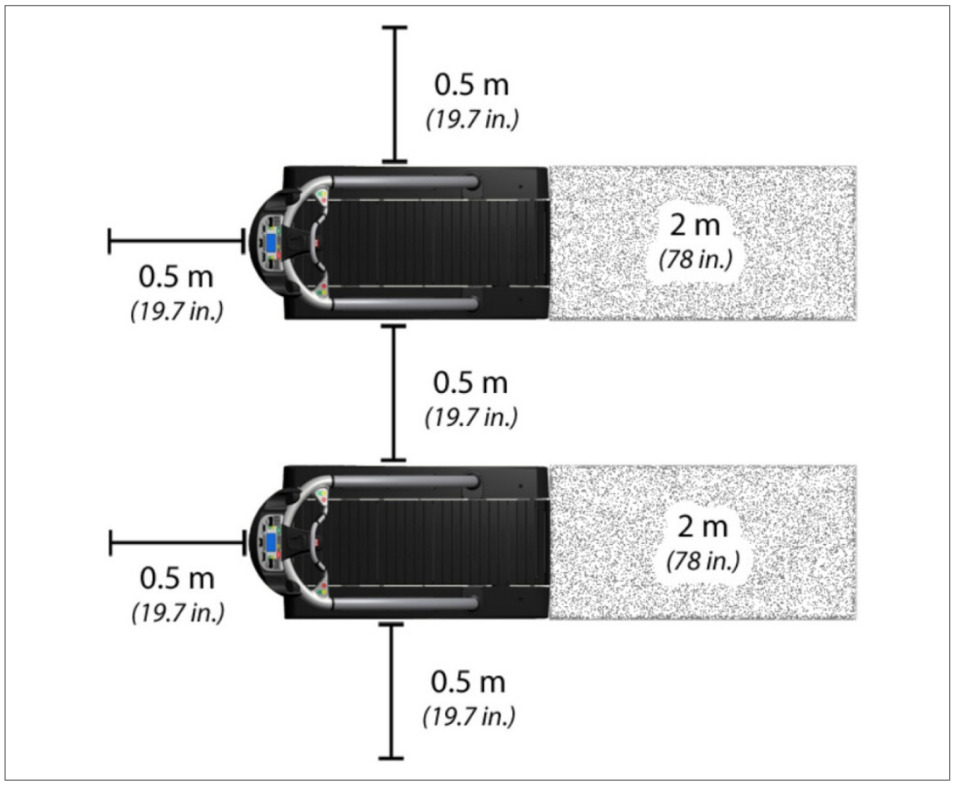


Fig. 6 Set-up, Clearances

6.3.1 Adjust Leveling Feet

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

Tools required for adjustment:

- 1x Phillips head screwdriver, size 2.

	4Front / Mercury / Path / Pro	Pro XL
Front Feet	1x box wrench or socket wrench, SW19	1x box wrench or socket wrench, SW24
Rear Feet		1x box wrench or socket wrench, SW29

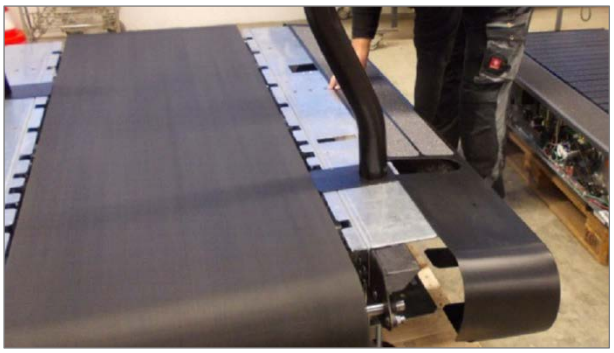


Fig. 7 Removing Side Panel

- Remove the covers on the left and right.

Fig. 8 Feet Height Adjustment

- Loosen the counter nut with a 19mm open-end wrench
- Turn the bottom nut on which the frame rest until the desired height is reached.
- Retighten the top 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 when the treadmill rocks slightly, or when one of the leveling feet does not touch the floor completely. In this case the treadmill can be realigned by applying the proper pressure on the railing.

6.3.2 Completion of Installation

Prior to starting operation (see sec. 7 page 49), 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.

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

6.4 Assembly Instructions

6.4.1 Preparation

The treadmill can be delivered in various states of assembly. Disassembly / assembly may be required for moves or relocation into other rooms.

NOTE

In WOODWAY sports treadmills standard (inch) screws and nuts are used, with few exceptions.
These are not compatible with metric fastening elements!

Preparation Steps

Due to the high weight of the device, it is recommended to install the treadmill as close to its final location as possible.

Carefully dismantle the shipping crate. To do this, remove the screwed connections. Remove protective foil from all packaged parts. Ensure that the surfaces are not damaged by sharp objects (knife, etc.).

NOTE

It is recommended to have a second person to assist in inserting the railing tubes or with the assembly.

6.4.2 4Front

Tools required for assembly:

- 1x combination wrench or ratchet wrench, SW13
- 1x Phillips screwdriver, size 2

Fig. 9 4Front Assembly, Side Panel

- Remove the covers on the left and right.

Fig. 10 4Front Assembly, Wiring

- Insert wire and protective cover into the guard rail tube to prevent damage during insertion.

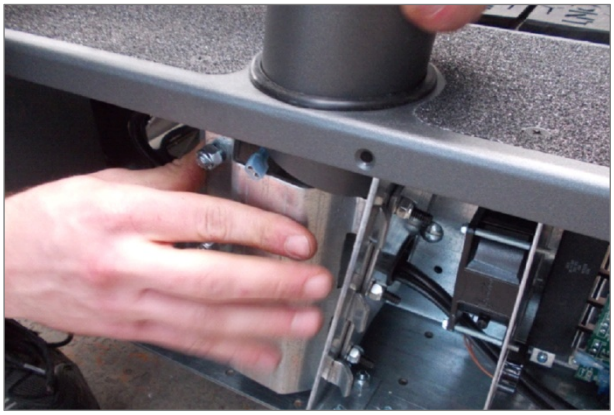


Fig. 11 4Front Assembly, Tube Mount

- Prepare the mount for the tube.

Fig. 12 4Front Assembly, Inserting Tubes

- Insert the railing tube into the mounts.
- Do not damage the wires!
- Observe hand protection!

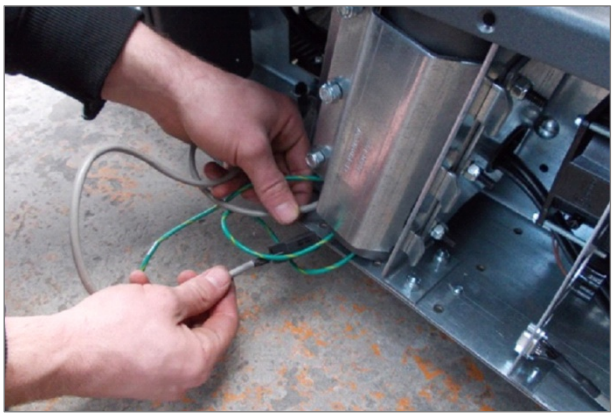


Fig. 13 4Front Assembly, Connection 1

- Pull the wire and protective cover out of the railing tube.

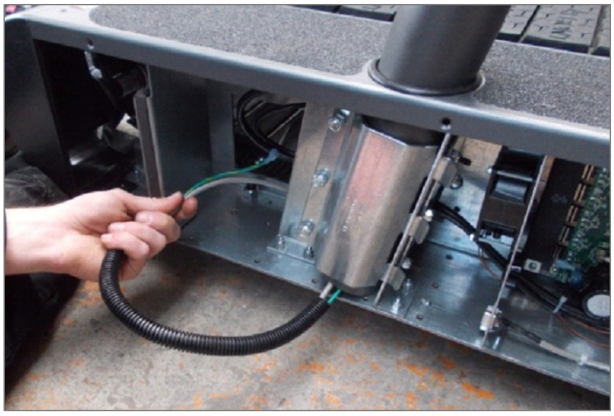


Fig. 14 4Front Assembly, Connection 2

- Lay the wire with protective cover behind the railing mount.

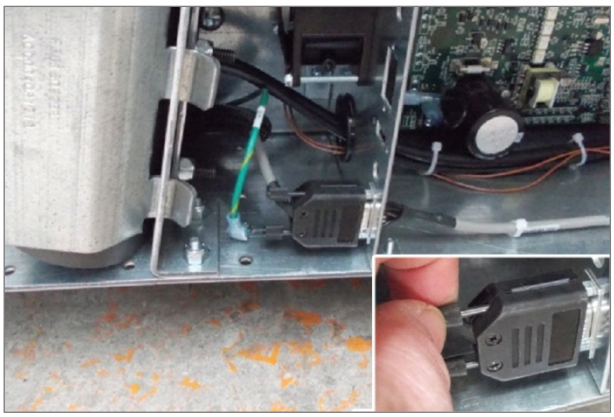


Fig. 15 4Front Assembly, Connection 3

- Insert the plug and tighten both retaining screws.
- Attach the protective conductor (green) to the contact tab on the housing.

NOTE:

Additional cables may be included depending on the model. For more information call WOODWAY Customer Service (see sec. 1.5 page 8).

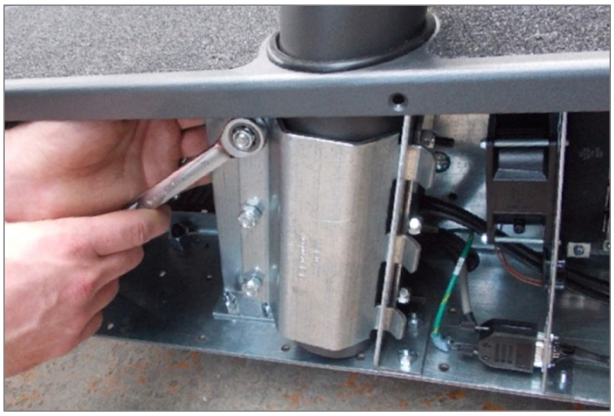


Fig. 16 4Front Assembly, Fixing the Railing

- Tighten railing mount bolts.

Fig. 17 4Front Assembly, Side Panel

- Replace the side panels, right and left and fix them with screws.

6.4.3 Mercury, Path

Tools required for assembly:

- 1x combination wrench or ratchet wrench, SW13
- 1x Phillips head screwdriver, size 1
- 1x Phillips head screwdriver, size 2

Fig. 18 Mercury/Path Assembly, Side Covers

- Remove the cover plates and side covers on both sides.

Fig. 19 Mercury/Path Assembly, Electronic Cover Plate

- Remove electronic cover plate on the right side of the treadmill frame.

Fig. 20 Mercury/Path Assembly, Wiring

- Insert wire and protective cover into the guard rail tube to prevent damage during insertion.

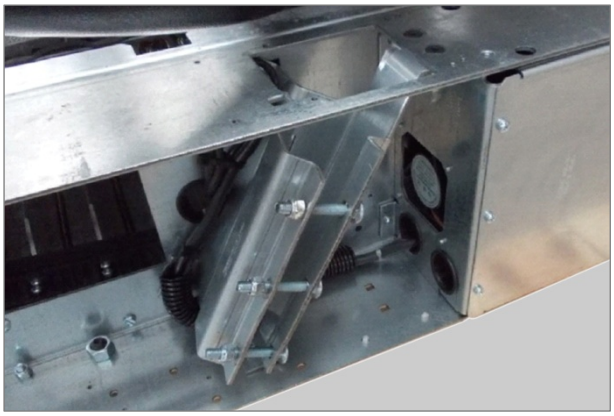


Fig. 21 Mercury/Path Assembly, Tube Mount

- Prepare the mount for the tube. Loosen bolts if necessary.

Fig. 22 Mercury/Path Assembly, Insert Tubes

- Insert the railing tube into the mounts.
- Do not damage the wires!
- Observe hand protection!

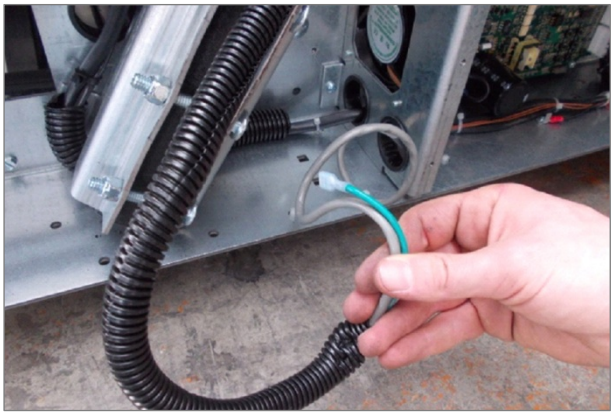


Fig. 23 Mercury/Path Assembly, Connection 1

- Pull wire and protective cover out of the railing tube (hole in railing tube).

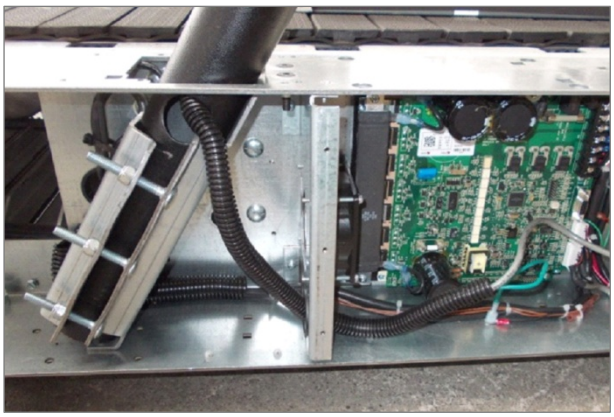


Fig. 24 Mercury/Path Assembly, Connection 2

- Lay the wire with protective cover through the hole in the console.

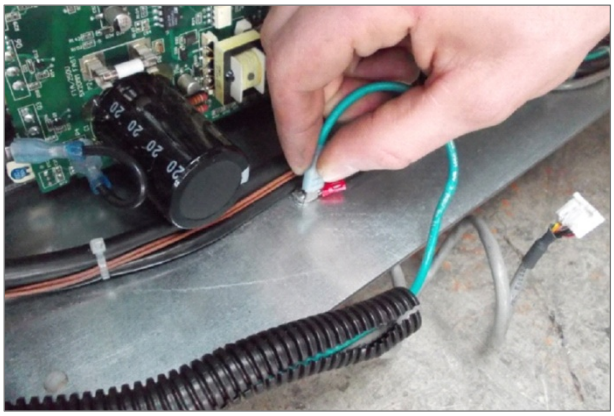


Fig. 25 Mercury/Path Assembly, Connection 3

- Attach the protective conductor (green) to the contact tab on the housing.

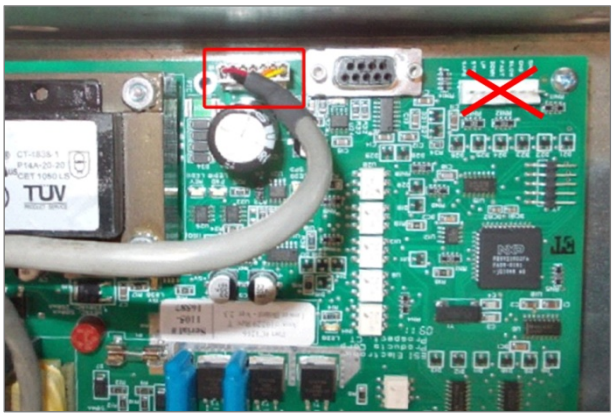


Fig. 26 Mercury/Path Assembly, Connection 4

- Connect the display cable to the circuit board.

NOTE:

Do not connect to the marked position (X)!

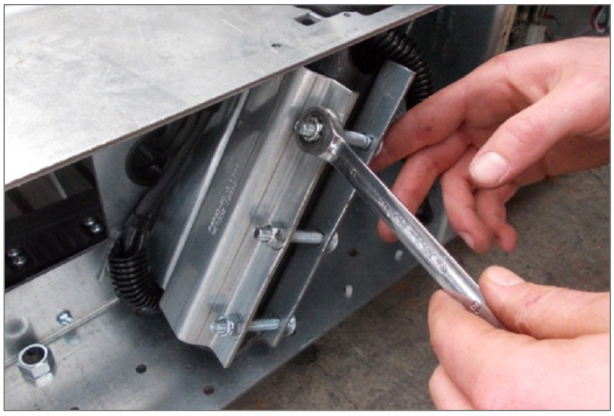


Fig. 27 Mercury/Path Assembly, Fixing the Railing

- Tighten railing mount bolts.

Fig. 28 Mercury/Path Assembly, Electronic Cover Plate

- Replace electronic cover plate on the right side of the treadmill frame.

Fig. 29 Mercury/Path Assembly, Side Covers

- Slide the side covers on both sides and fix with screws (do not tighten the screws yet).

Fig. 30 Mercury/Path Assembly, Cover Plates

- Slide the cover plates over the tube on both sides and fix with screws.

NOTE 1:

First tighten the large screws, then the rest of the screws.

Ensure distance between side covers and running surface!

NOTE 2:

The side covers must not be in contact with the drive belts on the rear left side!

6.4.4 Pro, Pro XL

Tools required for assembly:

- 1x Phillips screwdriver, size 1
- 1x Phillips screwdriver, size 2
- 1x combination wrench, SW13
- 1x ratchet wrench, SW13
- 1x Allen key, SW8

Fig. 31 Pro/ProXL Assembly, Insert Railing

- Insert both sides of the railing into the mounts.
- First slide the cover plates over the railing.
- Do not damage the wires!
- Observe hand protection!

Fig. 32 Pro/ProXL Assembly, Connecting Railing

- Join the two railing parts together.

Fig. 33 Pro/ProXL Assembly, Screwing Railing Together

- Connect the railing sections with two Allen screws.

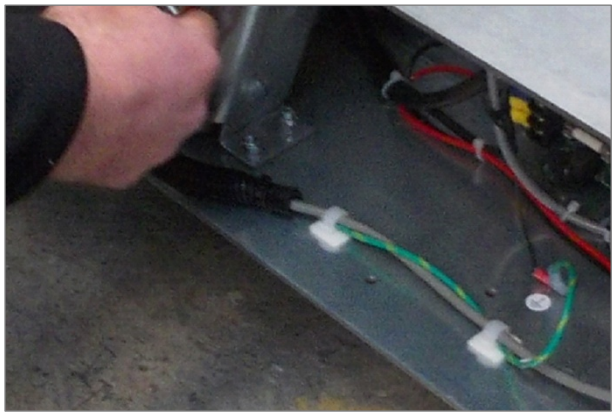


Fig. 34 Pro/ProXL Assembly, Connection 1

- Pull the wire and wire protection out of the side of the railing tube and lay it along the railing mount to the circuit board.
-

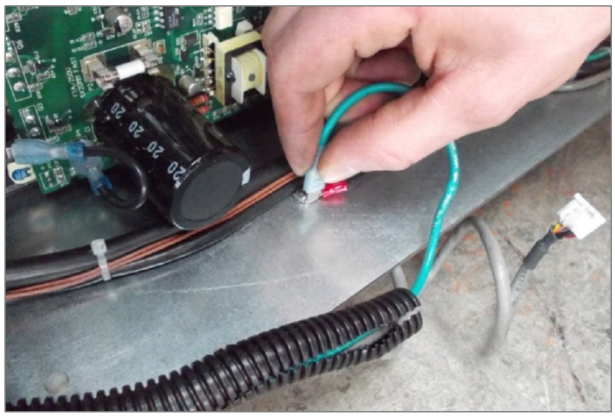


Fig. 35 Pro/ProXL Assembly, Connection 2

- Attach the protective conductor (green) to the contact tab on the housing.

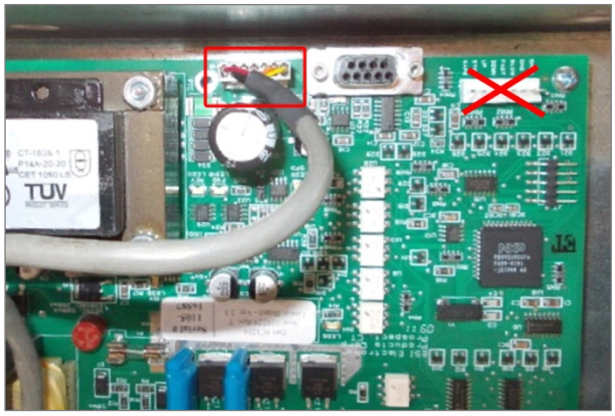


Fig. 36 Pro/ProXL Assembly, Connection 3

- Connect the display cable to the circuit board.

NOTE 1:

Do not connect to the marked position (X)!

NOTE 2:

Additional cables may be included depending on the model. For more information call WOODWAY Customer Service (see sec. 1.5 page 8).

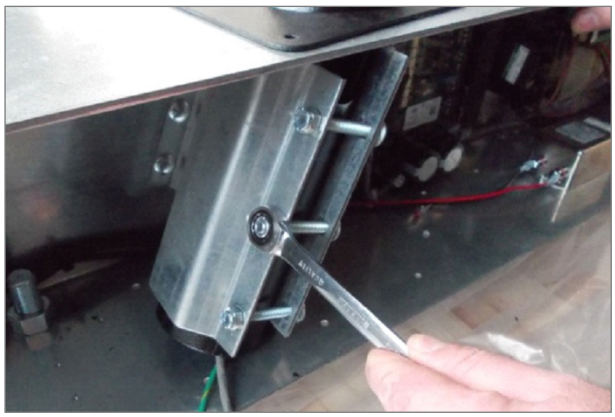


Fig. 37 Pro/ProXL Assembly, Fixing the Railing 1

- Tighten railing mount bolts on the right side.

Fig. 38 Pro/ProXL Assembly, Fixing the Railing 2

- Tighten railing mount bolts on the left side.

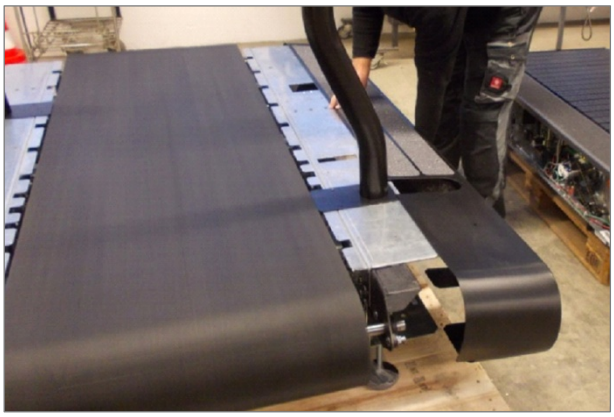


Fig. 39 Pro/ProXL Assembly, Side Covers

- Slide the side covers on both sides and fix with screws (do not tighten the screws yet).

NOTE:

First tighten the large screws, then the rest of the screws.

Ensure distance between side covers and running surface!

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.

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!

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

7.1 For Your Safety

NOTE

CONSULT A DOCTOR!

If you are over 40 years old, have a heart condition, are overweight or have not been involved in sports for several years, a visit to the doctor is recommended before beginning an intensive training program.

For safe operation and successful training please read the following points for your own safety before starting to use the treadmill:

- Keep hanging clothing and towels away from the running surface. Ensure that shoelaces do not extend beyond the bottom of the shoe sole.
- Keep the area behind the treadmill clear and make sure that there is a space of at least 2m between the rear of the treadmill and walls or furniture.
- Keep hands away from all moving parts.
- Children and animals may not mount the treadmill! Never leave children or animals near the treadmill unattended.
- Check the treadmill for defective or loose components before use and replace or repair if necessary.
- Mount and dismount the treadmill carefully. Never mount or dismount the treadmill when the running surfaced is moving. For safety reasons hold on to the railing and straddle the running surface with your feet on the left and right. Do not dismount the treadmill until the running surface stops moving.
- Wear suitable running shoes with a high degree of grip. Do not use shoes with heels, leather soles or running shoes with spikes. To protect your device, ensure that there are no stones in the profile of your shoe soles.
- Take a few minutes to get your heart rate in the desired training range. Walk slowly for some time after a training session to give your body enough time to cool down. During this time your pulse rate will go back to the normal range.
- Never let loose objects (balls) roll under the treadmill. They could be pulled into the device during operation.

ATTENTION

The user/owner or representative of the equipment is responsible for ensuring that regular maintenance and inspection of the treadmill is carried out.

Defective components must be replaced immediately. The treadmill should not be used until it is repaired by a professional!

7.2 Practical Training

7.2.1 Professional Consultation

For all treadmill training beginners, it is recommended to seek the advice of a professional fitness instructor or personal trainer, to obtain an overall fitness assessment before starting an exercise program and developing an optimal training program.

For optimal use and safety during treadmill training, WOODWAY recommends running on the treadmill in an upright and natural running position and to avoid dragging foot movement.

7.2.2 Warm-Up and Cool-Down

A warm-up before each workout and a cool-down after each workout is recommended. If possible, you should always do some basic stretching exercises for the legs before and after training. The stretching exercises make you more flexible and this prevents muscle soreness and injury during routine activities.

7.2.3 Proper Body Form

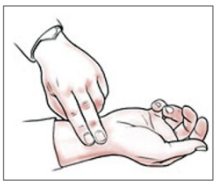
When running or walking, it is important to maintain proper form to maximize efficiency and results and minimize the possibility of personal injury.

Keep your posture upright; avoid leaning forwards or backwards from the waist, as this can cause unnecessary back strain and decrease your efficiency. Keep your head, shoulders, and hips in line with each other and aim to have your foot strike the running surface in line with your center of gravity (i.e. you should strike the running surface with the midfoot or forefoot). If you land on your heels, you are over-striding and should shorten your stride in order to increase momentum and overall efficiency.

Keep your arms at your sides, either relaxed and naturally pendulum-like (walking) or with a loose of 90-degree angle, bending at the elbows (running). Do not allow your hands to cross the center of your body or your shoulders to move from side to side.

7.2.4 Measuring Heart Rate

To select the optimum fitness levels for the workout, it is important to determine your heart rate and your pulse as accurately as possible. For this the use of a high-quality heart rate monitor is recommended.



In the event that you do not have a heart rate monitor, you can feel your pulse by placing your fingers on the underside of your wrist or on one side of your neck. Look at the second hand of a clock and count how many beats you feel in 15 seconds. Multiply this number by four to calculate the BPM (beats per minute). Your heart rate is required when you do your fitness test.

7.2.5 Calculating Maximum Heart Rate

To determine your maximum heart rate subtract your age from the number 220 (general formula). The difference is an approximation of your maximum heart rate. This formula is used by the American Heart Association (AHA) and the American College of Sports Medicine (ACSM). Your actual maximum heart rate is determined by a stress test performed by your doctor. 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 an exercise program.

Heart Rate Recommendation

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

7.2.6 Heart Rate Chart

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*

7.2.7 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.

Endurance Training

The priority is regularity and persistence of training - not the intensity. Fitness experts recommend in the beginning training three to four 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 four to five 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.

7.3 Contact Heart Rate Measurement

Grips which are located on the front cross bar of the railing transmit the user's heart rate. The transmission begins when the user holds on to the grips. After starting the device, the user may hold his hands on the grips for a heart rate measurement at any time. Please wait 5-10 seconds to obtain an accurate heart rate reading. The user's heart rate is automatically displayed on the display panel under "Heart rate".

NOTE

The measurement of the heart rate via grips is not as exact as EKG and is only considered an approximation.

7.4 Heart Rate Monitor

The display was designed so that the user's heart rate is indicated when compatible heart rate transmitters are used, i.e. POLAR® measuring device (GymLink compatible) and ANT+ (4Front and Pro/Pro XL). In order to display the user's heart rate accurately on the screen, the built-in receiver display must receive a stable heart rate signal from the transmitter.

Please visit the following links to view a full list of monitors and devices with POLAR® (GymLink) and ANT+ compatibility.

- www.polar.com/us-en/support/compatibility_with_my_Polar
- http://www.thisisant.com/directory/

Heart rate measuring systems consists of three main elements:

- Sensor/transmitter
- Chest strap/belt (Polar®)
- 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/minute.

⚠ 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.

7.4.1 Applying the Chest Strap

The sensor / transmitter is to be worn below the chest and above the abdomen, preferably directly on the skin (not over clothing). 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. After you have removed the transmitter, wash the belt with a mild detergent in warm water and rinse thoroughly with clean water. However, since the transmitter can be activated by moisture, it should be wiped dry after cleaning. Never clean the surfaces of the transmitter with force.

Fig. 40 Chest Strap with POLAR Transmitter

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

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

Transmission Signal: The transmitter has a reach of about 120cm. Depending on the model the receiver is located in the display of the device or below the emergency-off switch on the railing. When positioning several treadmills next to each other ensure that a minimum distance between the devices is kept in order to avoid the interference of the transmission signals between the runners.

7.4.2 Transmitter Function

The signal will only be transmitted if the transmitter is within one meter of the receiver. Note that variations in the heart rate display can occur when the transmitter is too close to other heart rate measuring devices. Maintain at least one meter distance from other devices.

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. Only one transmitter should only be used within range of a receiver since the receiver might otherwise receive multiple signals and transmit inaccurate readings.

7.5 Before Each Use

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

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

⚠ WARNING

Danger of Being Pulled into Moving Parts!

In the event of a fall, 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.

7.6 Switching Device On / Off

NOTE

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

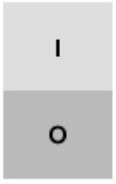
The device cannot be operated without releasing the emergency stop function and attaching the magnet to the magnetic switch!

⚠ WARNING

Danger of Device Moving Down when Switched On!

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

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



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

Fig. 41 *ON/OFF switch*

When training is finished, switch the treadmill off again via the switch on the display. The device is in STAND-BY mode again.

⚠ WARNING

Danger Through Speeding Up of the Running Surface!

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

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

ATTENTION

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

- ► Never step on the running surface during the initialization phase!
- ► Do not leave the running surface until it switches back into stand-by mode.
- ► Never leave the treadmill unattended while it is switched on!
- ► Switch the device off via the main switch on the power supply console when it will not be used for a long time.

7.7 LED Standard Display

The keys on the display panels are diaphragm type switches, with which complete control of the device is possible. The emergency switch is a magnetic sensor which detects the presence of a magnet and switches the treadmill off immediately when the magnet is removed.

There are five indicators each with seven segments with which program statistics are displayed. The four-digit displays are programmed to display the time in the 00:00 format.

The numeric keypad (Path and Mercury) is used for CSAFE compatibility and has no other function.

Fig. 42 Standard Display I

Fig. 43 Standard Display II

7.7.1 Display Parameters

- Manual SPEED and INCLINE control.
- Statistics display: DISTANCE, CALORIES, TIME, PACE, HEART RATE, METS.
- Treadmill SPEED and INCLINE display.
- Controlled increase/decrease of speed, safety checks and automatic shut-off in case of errors.

7.7.2 Turning the Display ON

First, check that the emergency stop magnet is in place. To switch the display on, press the "ON" key. A "0" is displayed in the speed and incline indicators. If the display is not lit, ensure that the treadmill is connected to the power supply and that the power switch is turned on.

7.7.3 Training Parameters

Training Start Press the SPEED**+** key to start training. The speed increases from "0". The time LED is lit and the time is displayed in the TIME display in the 00:00 format and counted. The DISTANCE and HEART RATE LEDs are lit and the corresponding values are displayed.

Active Control Element During training the user can change the incline using the incline keys UP and DOWN, and the speed using the SPEED keys **+** and **-** . The user can interrupt the training at any time using the PAUSE key.

Training Interruptions When the user presses the PAUSE key the treadmill stops. The TIME display indicates "PAUSE" and the other seven-part displays maintain the values from the time that the PAUSE key was pressed. To begin training again the user can press the PAUSE key again. The speed is increased to the former value and the time display starts counting the time.

Displayed Statistics During training, the user can press the PACE, CALORIES, or METS keys to change between the values for the distance, time and heart rate. The distance is replaced by calories, the time is replaced by time/km, and the heart rate is replaced by METs. When the PACE, CALORIES, METS key is pressed again, the displays show the original values again. The LEDs for the respective statistics are lit.

End Training The user can press the OFF key at any time to end the training session. Speed and incline are reset to zero. The training statistics are displayed for 10 seconds. The time display shows the total time and the DISTANCE/CALORIES display shows the total distance and total calories burned alternately.

NOTE

The HOLD key on the Mercury keyboard corresponds to the OFF key on the screen.

7.7.4 Description of Display Elements

TIME: The time is displayed in 00:00 format. Time is always counted.

SPEED: The speed is displayed in 00.0 format. The SPEED shows the user's current sped in kilometers per hour (km/h). Valid speeds are: from 0.0 to the maximum speed (max. speeds vary depending on the model and applicable options).

DISTANCE: The distance is displayed in 00.00 format. DISTANCE shows the accumulated user's distance in kilometers.

CALORIES: The calories are displayed in 0000 format. CALORIES shows the user's accumulated burnt calories. They are calculated based on the ACSM formula. If no weight is entered, the calories are calculated based on a standard weight of 70 kg.

PACE: The time/km is displayed in 00:00 format. PACE represents the time required to run one kilometer at the current speed.

METS: METs is displayed in 00.0 format and represents the conversion of 3.5 milliliters of oxygen per kilogram of body weight per minute.

HEART RATE: The heart rate is displayed in 000 format. HEART RATE represents the user's actual heart rate (pulse).

INCLINE: The incline display is used to show the user's current incline or to set the incline. Valid incline values start at 0 and increase in steps of 0.1% to the maximum level of incline, which varies depending on the model and the associated options.

7.8 LED Group Training Display

The keys on the display panels are diaphragm type switches, with which complete control of the device is possible. The emergency switch is a magnetic sensor which detects the presence of a magnet and switches the treadmill off immediately when the magnet is removed.

There are five indicators each with seven segments with which program statistics are displayed. The four-digit displays are programmed to display the time in the 00:00 format.

Fig. 44 Group Training Display

7.8.1 Display Parameters

- Manual SPEED and INCLINE control.
- Statistics display: DISTANCE, CALORIES, TIME, PACE, HEART RATE, METS.
- Treadmill SPEED and INCLINE display.
- Controlled increase/decrease of speed, safety checks and automatic shut-off in case of errors.

7.8.2 Turning the Display ON

First, check that the emergency stop magnet is in place. To switch the display on, press the "ON" key. A "0" is displayed in the speed and incline indicators. If the display is not lit, ensure that the treadmill is connected to the power supply and that the power switch is turned on.

7.8.3 Training Parameters

Training Start Press the SPEED **+** key to start training. The speed increases from "0". The time LED is lit and the time is displayed in the TIME display in the 00:00 format and counted. The DISTANCE and HEART RATE LEDs are lit and the corresponding values are displayed.

Active Control Element During training the user can change the incline using the incline keys UP and DOWN, and the speed using the SPEED keys **+** and **-** . The user can interrupt the training at any time using the PAUSE key.

Quick Control Element During training, the user can use the INSTAT SPEED and INSATANT INCLINE control keys to more quickly change the speed or incline to the desired level. To set the speed or incline to a value between those available using quickset keys, select the nearest quickset value key and then use the manual controls as described above to adjust to the desired value.

Training Interruptions When the user presses the PAUSE key the treadmill stops. The TIME display indicates "PAUSE" and the other seven-part displays maintain the values from the time that the PAUSE key was pressed. To begin training again the user can press the PAUSE key again. The speed is increased to the former value and the time display starts counting the time.

Displayed Statistics During training, the user can press the PACE, CALORIES, or METS keys to change between the values for the distance, time and heart rate. The distance is replaced by calories, the time is replaced by time/km, and the heart rate is replaced by METs. When the PACE, CALORIES, METS key is pressed again, the displays show the original values again. The LEDs for the respective statistics are lit.

End Training The user can press the OFF key at any time to end the training session. Speed and incline are reset to zero. The training statistics are displayed for 10 seconds. The time display shows the total time and the DISTANCE/CALORIES display shows the total distance and total calories burned alternately.

NOTE
The STOP key on the side switches corresponds to the OFF key on the screen.

7.8.4 Description of Display Elements

TIME: The time is displayed in 00:00 format. Time is always counted.

SPEED: The speed is displayed in 00.0 format. The SPEED shows the user's current sped in kilometers per hour (km/h). Valid speeds are: from 0.0 to the maximum speed (max. speeds vary depending on the model and applicable options).

DISTANCE: The distance is displayed in 00.00 format. DISTANCE shows the accumulated user's distance in kilometers or miles.

CALORIES: The calories are displayed in 0000 format. CALORIES shows the user's accumulated burnt calories. They are calculated based on the ACSM formula. If no weight is entered, the calories are calculated based on a standard weight of 70 kg.

PACE: The time/km is displayed in 00:00 format. PACE represents the time required to run one kilometer or mile at the current speed.

METS: METs is displayed in 00.0 format and represents the conversion of 3.5 milliliters of oxygen per kilogram of body weight per minute.

HEART RATE: The heart rate is displayed in 000 format. HEART RATE represents the user's actual heart rate (pulse).

INCLINE: The incline display is used to show the user's current incline or to set the incline. Valid incline values start at 0 and increase in steps of 0.1% to the maximum level of incline, which varies depending on the model and the associated options.

7.9 LCD Personal Trainer Display

The keys in the display fields allow the user to type command parameters to control treadmill operation. The user can also monitor their training progress. The emergency switch is a magnetic sensor which detects the presence of a magnet and switches the treadmill off immediately when the magnet is removed. There are five indicators each with seven segments with which program statistics are displayed. The four-digit displays are programmed to display the time in the 00:00 format.

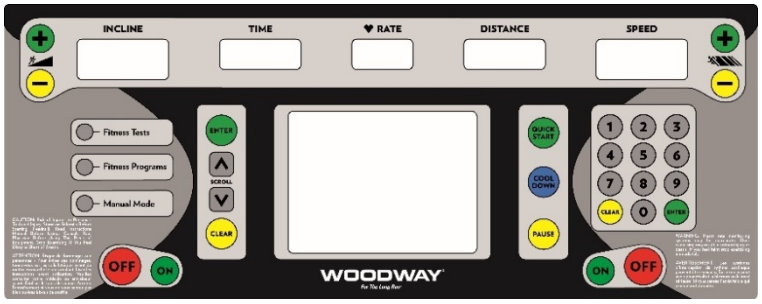


Fig. 45 Personal Trainer Display I

Fig. 46 Personal Trainer Display II

In the LCD display with a resolution of 320 x 240 pixels, the user's program selection profile and the progress during training are shown. With the program profiles the speed and incline curves are shown in charts.

The heart rate is measured using an ANT+ / POLAR® compatible receiver. In addition, there is an EKG pulse sensor in the railing for measuring the pulse rate through grip.

NOTE

The measurement of the heart rate via grips is not as exact as EKG and is considered an approximation!

7.9.1 Display Parameters and Operating Functions

The user can control and display the following functions using the operator keypad:

- Manual SPEED and INCLINE control.
- Statistics display: DISTANCE, CALORIES, SPEED, INCLINE, TIME, PACE, METS, HEART RATE.
- 10 integrated programs including manual operation.
- 100 user modifiable programs plus 4 fitness logs.
- Automatic SPEED and INCLINE adjustment in programs.
- Controlled increase/decrease of speed, safety checks and automatic shut-off in case of errors.

7.9.2 Description of Display Elements

The indicators in the display indicate the following data:

TIME: The time is displayed in 00:00 format. Time is always counted.

SPEED: The speed is displayed in 00.0 format. The SPEED shows the user's current sped in kilometers per hour (km/h). Valid speeds are: from 0.0 to the maximum speed (max. speeds vary depending on the model and applicable options).

DISTANCE: The distance is displayed in 00.00 format. DISTANCE shows the accumulated user's distance in kilometers or miles.

CALORIES: The calories are displayed in 0000 format. CALORIES shows the user's accumulated burnt calories. They are calculated based on the ACSM formula. If no weight is entered, the calories are calculated based on a standard weight of 70 kg.

PACE: The time/km is displayed in 00:00 format. PACE represents the time required to run one kilometer or mile at the current speed.

METS: METs is displayed in 00.0 format and represents the conversion of 3.5 milliliters of oxygen per kilogram of body weight per minute.

HEART RATE: The heart rate is displayed in 000 format. HEART RATE represents the user's actual heart rate (pulse).

INCLINE: The incline display is used to show the user's current incline or to set the incline. Valid incline values start at 0 and increase in steps of 0.1% to the maximum level of incline, which varies depending on the model and the associated options.

7.9.3 Quick Start (User Defined Operation)

- First, ensure that the treadmill is plugged into the power supply and that the power switch (cutout in the side cover bottom right) is switched on.
- Check that the EMERGENCY STOP MAGNET is in place.
- To turn the display press and hold the ON key until the LED and LCD displays are lit. All functions can now be operated using the mentioned surrounding keys:
  - Quick Start
  - Manual Mode with weight input
  - Fitness Programs
  - Fitness Tests
  - Dynamic / Braking Mode

NOTE

All specified options are located far left on the display and can be selected there directly.

7.9.4 Quick Start Display Parameter

The time is counted from zero, the speed starts at 0.1 km/h and the distance traveled and calories are accumulated. An oval 400-meter track is displayed the LCD display. A blinking point which represents the user's position moves around the track (counter-clockwise). In the middle of the track "Lap = 0" is displayed. Each lap around the track represents 400 meters. The lap counter counts each completed lap.

The number keys, CLEAR key and ENTER key are deactivated during this time.

During training in user defined mode, the user can change the incline using the incline keys UP and DOWN, and the speed using the speed keys FAST and SLOW. The user can interrupt the training at any time by pressing the PAUSE key.

The user course is laid out as shown in the following figure:

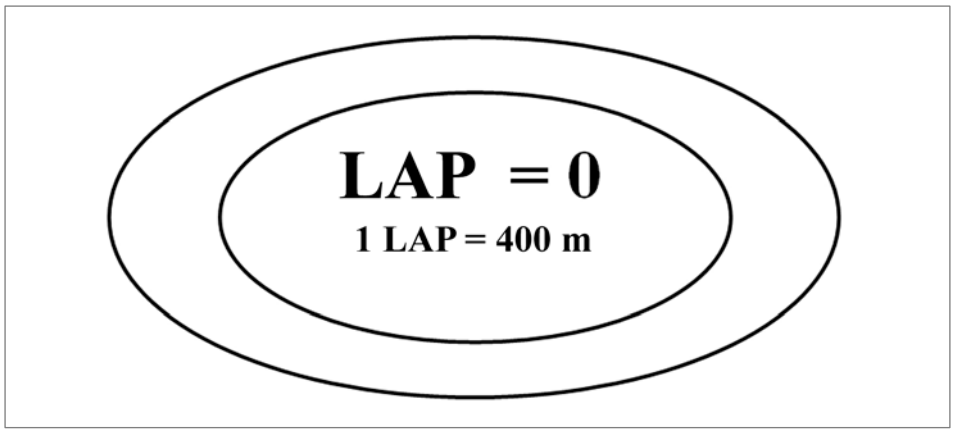


Fig. 47 User Defined Track

Training Interruptions

When the user presses the PAUSE key the treadmill stops. The following information is shown on the LCD display: "PAUSE - CONTINUE: PRESS PAUSE"

The statistics are stopped with the pressing of the PAUSE key. When the user

presses the PAUSE key again, the training continues. The CLEAR key is activated during the interruption. When the CLEAR key is pressed, the entire treadmill statistic is reset.

The statistics are displayed in the bottom of the screen throughout the training. It displays the information PACE, CALORIES, CAL / HOUR, VERTICAL and METs.

7.9.5 Starting a Training Program

NOTE

Before starting a training program, it is advisable to consult a certified training professional or your family doctor.

Selecting Program

The program setup is started by pressing the FITNESS PROGRAMS button on the left side of the screen (or by selecting this option in the main Start menu).

Once you are in a program, you must use the number keys or the FAST-/SLOW key to set all required values. Scroll to change fields.

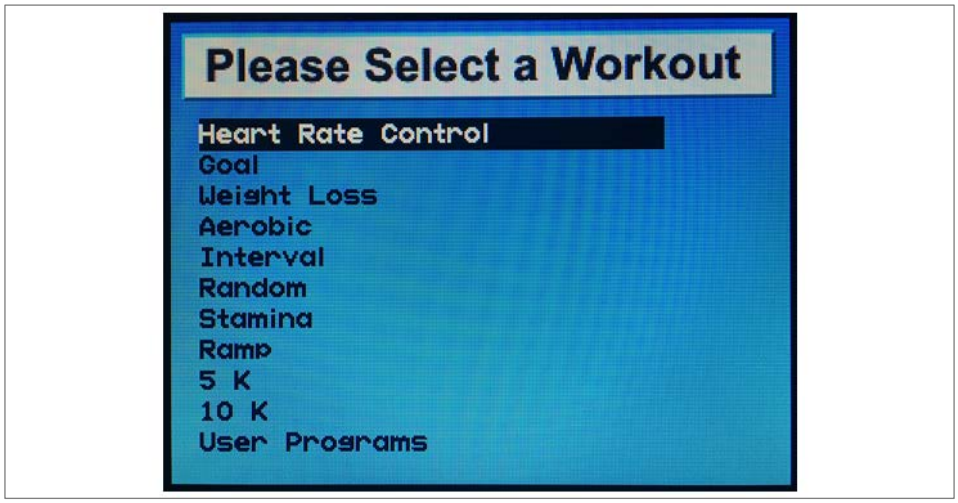


Fig. 48 Fitness Programs Menu

NOTE

Fitness Program Menu is available in various languages.

Changing Program during Training

Press the FITNESS PROGRAMS key (or any other button in the menu) left on the screen to bring up the main menu and make another selection.

Entering the Difficulty Level

The program profile and the program title are displayed in the LCD display. The standard difficulty level 1 is displayed. The program profile is initially displayed at a higher level in order to better recognize the process. The desired difficulty level can be entered using the number keys. When selecting a difficulty level, the user should consider their current level of fitness and training goals. The current training level can be deleted using the CLEAR key. When the user has finished entering the desired training level, they can press the scroll key to confirm the entry and enter to the next value.

Entering Program Time

Next the program time must be entered. The standard 20:00 time is displayed. The user can enter their desired training duration using the number keys. The current time can be deleted using the CLEAR key. When the user has finished entering the desired training duration, they can press the scroll key to confirm the entry and enter to the next value.

Entering the Weight

Next the user's weight must be entered. For a quick start, the user can bypass the weight menu by simply pressing the FAST key and accepting the standard weight of 70 kg. They can then start the user defined training or enter a weight using the keypad. Valid weight values are 22 - 227 kg. The current weight can be deleted using the CLEAR key. When the user has finished entering the weight, they can press the enter key to confirm the entry and begin the training.

Program Start

The time is counted down to zero, the speed is set to the lowest possible speed, and the incline is set to the lowest possible level. Distance and calories are accumulated. The program profile is shown on the LCD display. The number keys, CLEAR key and ENTER key are then deactivated.

Usable Variables

While the program is running the user can change the incline using the incline keys UP and DOWN, and the speed using the speed keys FAST and SLOW. The user can interrupt the training at any time by pressing the PAUSE key. The status of the program you are in lights up to show your progress. The signal sounds 3 seconds before the speed and / or incline changes.

Pausing During Training

When the PAUSE key is pressed the treadmill stops. The following information is shown on the LCD display: "PAUSE - CONTINUE: The statistics are stopped with the pressing of the PAUSE key. When the user presses the PAUSE key again, the training continues. The CLEAR key is activated during the interruption. When the CLEAR key is pressed the entire treadmill statistics reset and the initial screen is displayed again (the LCD display shows the message "###Press 'FAST' for Quick Start or select a program###").

Displaying the Statistics

The statistics are displayed at the bottom of the screen throughout training. Here information such as PACE, CALORIES, CALORIES / HR, VERTICAL FEET and METs can be found.

Program End

When the program is completed, "###Program Complete###" appears on LCD 3 for a few seconds. Speed and incline are then reset to zero.

When the OFF key is pressed, speed and incline reset to zero. "PACE = 00:00, CALORIES = 0000, METs =0.00" will be displayed on the LCD for 5 seconds. Then the display will switch off.

7.9.6 Fitness Programs

Heart Rate Control Program

Follow the instructions below to begin the Heart Rate Control fitness program.

NOTE

The automatic heart rate programs can only work effectively if you wear a chest strap for heart rate measurement!

- When the automatic pulse program has been selected the user is prompted to enter AGE, TARGET HEART RATE, MAXIMUM SPEED, MAXIMUM TIME and WEIGHT on the initial screen. The user can enter the age using the number keys. (Valid age entries are 15–100.) The current age can be deleted using the CLEAR key. When the user has entered their age, the scroll-down key is used to move to the next value. When the age is changed, the target heart rate changes automatically. When the displayed value is correct, proceed to the next value.
- The target heart rate can also be entered using the number keys. After the correct value has been entered, press the scroll down key to proceed to the next value. The user must select the control type they want to use using the FAST/SLOW key (only speed, only incline or both).
- If the automatic pulse is selected with “SPEED ONLY” or “BOTH” criteria, the user must next select the maximum speed using the number keys. Use the SCROLL-DOWN key to complete the entry by entering a maximum time and the user's weight (or just press ENTER to use the current values).
- When the training begins, the automatic pulse profile is displayed on the LCD display. Above the profile illustration a title will be displayed which indicates what kind of automatic pulse is being used.

NOTE

The value 0.1 km/h can be seen in the speed display. To actually start the workout you must manually select the speed of the device according to your feeling. The automatic pulse takes over the control of the speed after a few seconds!

- While using the program the user can change the incline using the incline keys UP and DOWN, and the speed using the speed keys FAST and SLOW. The target heart rate can be changed at any time while the automatic heart rate control program is being executed. The user can enter a new target heart rate using the number keys. Press the CLEAR key to delete the newly entered target heart rate. Press the ENTER key to confirm it.

Only one of the automatic heart rate control types can be used during training. The user selects his desired algorithm during program setup.

Incline Only – Heart Rate Control

This automatic heart rate program only controls the incline. The user selects the speed.

The program functions as follows:

- If the actual heart rate is 80 beats per minute (BPM) below the target, the incline is not adjusted. As a result proper warm-up phase is possible.
- If the actual heart rate is 26-80 BPM below the target, the incline will increase 1% after 15 seconds.

- If the actual heart rate is 6-25 BPM below the target, the incline will increase 1% after 30 seconds.
- If the actual heart rate is 3-25 BPM below the target, the incline will increase 0.5% after 30 seconds.
- If the actual heart rate is at least 3 BPM above the target, the incline will decrease 1% after 15 seconds.
- There is no adjustment when the actual heart rate deviates from the target by a maximum of 2 BPM.

Speed Only – Heart Rate Control

This automatic heart rate program only controls the speed. The user selects the incline.

The program functions as follows:

- If the actual heart rate is 80 beats per minute (BPM) below the target, the speed is not adjusted. As a result proper warm-up phase is possible.
- If the actual heart rate is 26-80 BPM below the target, the speed will increase 0.64 km/h (0.4 mph) after 8 seconds.
- If the actual heart rate is 6-25 BPM below the target, the speed will increase 0.32 km/h (0.2 mph) after 15 seconds.
- If the actual heart rate is 3-5 BPM below the target, the speed will increase 0.16 km/h (0.1 mph) after 15 seconds.
- If the actual heart rate is at least 3 BPM above the target, the speed will decrease 0.32 km/h (0.2 mph) after 15 seconds.
- There is no adjustment when the actual heart rate deviates from the target by a maximum of 2 BPM.

Both – Heart Rate Control

This automatic pulse program controls the incline as well as the speed.

The program functions as follows:

- The speed is increased in increments until 80% of the user's maximum speed is reached (calculation based on user training level input).
- The incline is increased in increments until 10% of the maximum treadmill incline is reached.
- The speed is increased in increments until the user's maximum speed is reached.
- The incline is increased until the maximum treadmill incline is reached.
- The speed and incline adjustments follow the above algorithms.

Goal Program This is a conditioning program that requires peak performance in the middle of training. These programs build strength and endurance.

SPEED DATA (MPH)

LEVEL	PHASE NR. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1	0.5	0.5	0.6	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.2	1.1	1.0	0.9	0.8	0.7	0.6	0.6	0.5	0.5
2	0.9	1.0	1.1	1.2	1.4	1.6	1.8	2.0	2.2	2.4	2.4	2.2	2.0	1.8	1.6	1.4	1.2	1.1	1.0	0.9
3	1.4	1.5	1.7	1.8	2.1	2.4	2.7	3.0	3.3	3.6	3.6	3.3	3.0	2.7	2.4	2.1	1.8	1.7	1.5	1.4
4	1.8	2.0	2.2	2.4	2.8	3.2	3.6	4.0	4.4	4.8	4.8	4.4	4.0	3.6	3.2	2.8	2.4	2.2	2.0	1.8
5	2.3	2.5	2.8	3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.0	5.5	5.0	4.5	4.0	3.5	3.0	2.8	2.5	2.3
6	2.7	3.0	3.3	3.6	4.2	4.8	5.4	6.0	6.6	7.2	7.2	6.6	6.0	5.4	4.8	4.2	3.6	3.3	3.0	2.7
7	3.2	3.5	3.9	4.2	4.9	5.6	6.3	7.0	7.7	8.4	8.4	7.7	7.0	6.3	5.6	4.9	4.2	3.9	3.5	3.2
8	3.6	4.0	4.4	4.8	5.6	6.4	7.2	8.0	8.8	9.6	9.6	8.8	8.0	7.2	6.4	5.6	4.8	4.4	4.0	3.6
9	4.1	4.5	5.0	5.4	6.3	7.2	8.1	9.0	9.9	10.8	10.8	9.9	9.0	8.1	7.2	6.3	5.4	5.0	4.5	4.1
10	4.5	5.0	5.5	6.0	7.0	8.0	9.0	10.0	11.0	12.0	12.0	11.0	10.0	9.0	8.0	7.0	6.0	5.5	5.0	4.5
STG	5.0	5.0	6.0	6.0	6.0	5.0	5.0	4.0	4.0	4.0	4.0	4.0	4.0	5.0	5.0	6.0	6.0	6.0	5.0	5.0

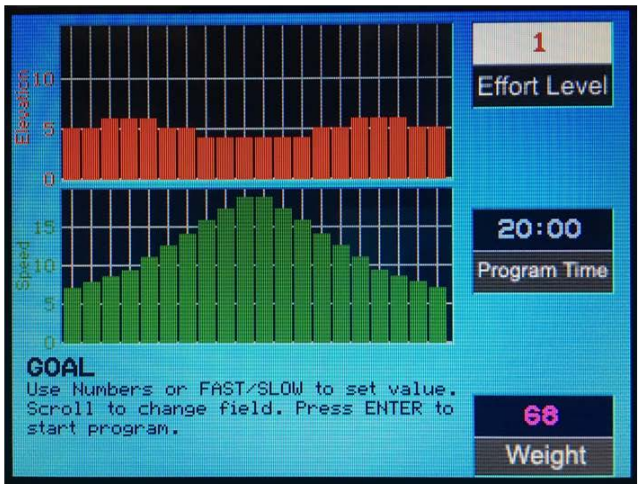


Fig. 49 Fitness Program - Goal

Weight Loss Program

This is a program with a constant load, gradual warm-up and cool-down phases. This program is designed to provide exercise at a constant level.

SPEED DATA (MPH)

LEVEL / PHASE NR.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1	0.5	0.7	0.9	1.0	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.0	0.9	0.7	0.5
2	0.9	1.4	1.7	2.0	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.0	1.7	1.4	0.9
3	1.4	2.1	2.6	3.0	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.0	2.6	2.1	1.4
4	1.8	2.8	3.4	4.0	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.0	3.4	2.8	1.8
5	2.3	3.5	4.3	5.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	5.0	4.3	3.5	2.3
6	2.7	4.2	5.1	6.0	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2	6.0	5.1	4.2	2.7
7	3.2	4.9	6.0	7.0	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	7.0	6.0	4.9	3.2
8	3.6	5.6	6.8	8.0	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	8.0	6.8	5.6	3.6
9	4.1	6.3	7.7	9.0	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	9.0	7.7	6.3	4.1
10	4.5	7.0	8.5	10.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	10.0	8.5	7.0	4.5
STG	0.0	0.0	1.0	2.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	2.0	1.0	0.0	0.0

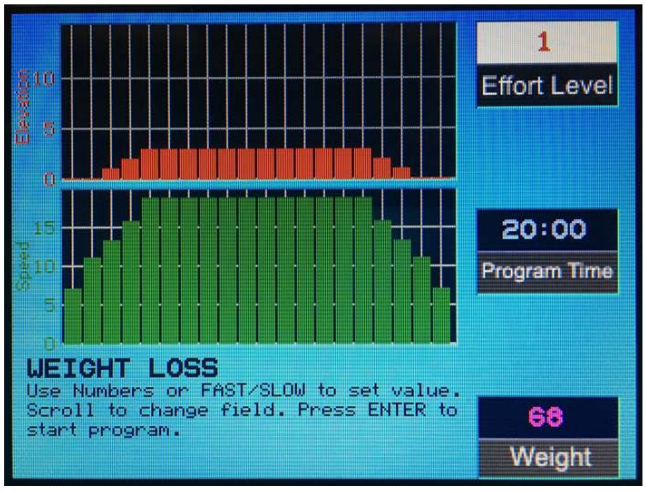


Fig. 50 Fitness Program - Weight Loss

Aerobic Program This is a program that uses high level training with three very intense phases. This program is designed to improve the aerobic condition.

SPEED DATA (MPH)

LEVEL \ PHASE NR.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1	0.5	0.6	0.8	1.0	1.2	1.0	0.8	0.6	0.8	1.0	1.2	0.8	0.6	0.8	1.0	1.2	1.0	0.8	0.6	0.5
2	0.9	1.2	1.6	2.0	2.4	2.0	1.6	1.1	1.6	2.0	2.4	1.6	1.1	1.6	2.0	2.4	2.0	1.6	1.2	0.9
3	1.4	1.8	2.4	3.0	3.6	3.0	2.4	1.7	2.4	3.0	3.6	2.4	1.7	2.4	3.0	3.6	3.0	2.4	1.8	1.4
4	1.8	2.4	3.2	4.0	4.8	4.0	3.2	2.2	3.2	4.0	4.8	3.2	2.2	3.2	4.0	4.8	4.0	3.2	2.4	1.8
5	2.3	3.0	4.0	5.0	6.0	5.0	4.0	2.8	4.0	5.0	6.0	4.0	2.8	4.0	5.0	6.0	5.0	4.0	3.0	2.3
6	2.7	3.6	4.8	6.0	7.2	6.0	4.8	3.3	4.8	6.0	7.2	4.8	3.3	4.8	6.0	7.2	6.0	4.8	3.6	2.7
7	3.2	4.2	5.6	7.0	8.4	7.0	5.6	3.9	5.6	7.0	8.4	5.6	3.9	5.6	7.0	8.4	7.0	5.6	4.2	3.2
8	3.6	4.8	6.4	8.0	9.6	8.0	6.4	4.4	6.4	8.0	9.6	6.4	4.4	6.4	8.0	9.6	8.0	6.4	4.8	3.6
9	4.1	5.4	7.2	9.0	10.8	9.0	7.2	5.0	7.2	9.0	10.8	7.2	5.0	7.2	9.0	10.8	9.0	7.2	5.4	4.1
10	4.5	6.0	8.0	10.0	12.0	10.0	8.0	5.5	8.0	10.0	12.0	8.0	5.5	8.0	10.0	12.0	10.0	8.0	6.0	4.5
STG	0.0	0.0	1.0	1.0	1.0	1.0	2.0	2.0	2.0	1.0	1.0	2.0	2.0	2.0	1.0	1.0	1.0	1.0	0.0	0.0

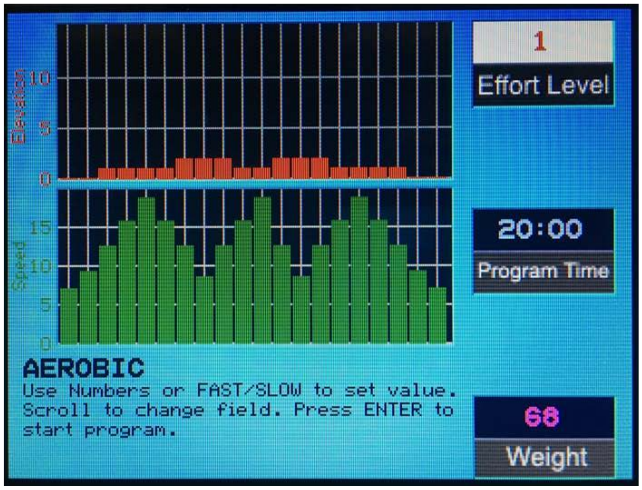


Fig. 51 Fitness Program - Aerobic

Interval Program

This interval program consists of interval 1 and interval 2. Speed and incline must be entered in each interval (using the number keys or the FAST/SLOW key). Use the scroll key to change fields. Time and weight must also be entered. Press ENTER to start the program.

When the program has started three diagrams will be shown. The incline is shown in red in the top part of the screen; the speed is shown in green in the middle, and the heart rate in yellow at the bottom of the screen. The UP/DOWN key can be used throughout the training to alternate between the used intervals.

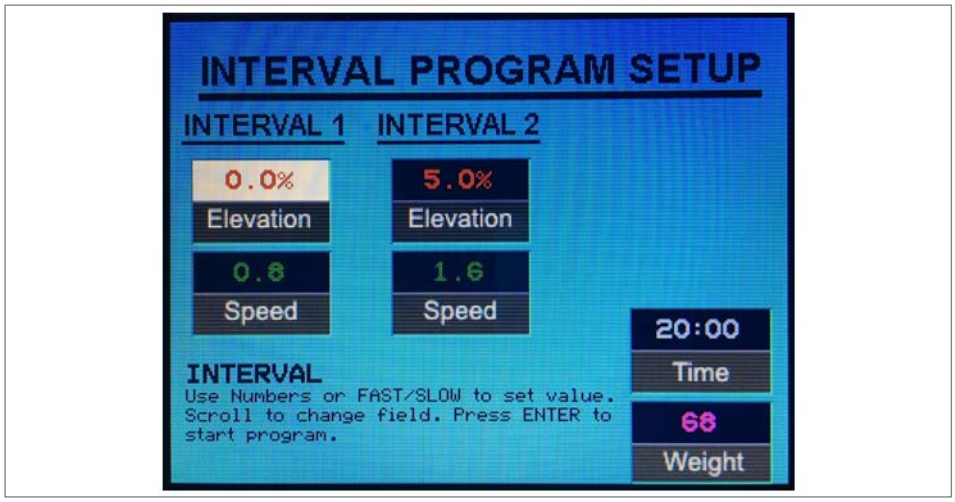


Fig. 52 Data Entry - Interval

Random Program This program selects varying speed and incline changes at random intervals.

SPEED DATA (MPH)

LEVEL \ PHASE NR.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1	0.4	0.5	0.8	0.8	0.6	0.9	1.1	0.6	0.8	0.6	1.0	0.7	1.2	0.8	0.6	0.6	0.8	1.1	0.6	0.5
2	0.8	1.0	1.6	1.5	1.2	1.7	2.1	1.1	1.6	1.1	2.0	1.4	2.4	1.6	1.2	1.1	1.6	2.1	1.2	0.9
3	1.2	1.5	2.4	2.3	1.8	2.6	3.2	1.7	2.4	1.7	3.0	2.1	3.6	2.4	1.8	1.7	2.4	3.2	1.8	1.4
4	1.6	2.0	3.2	3.0	2.4	3.4	4.2	2.2	3.2	2.2	4.0	2.8	4.8	3.2	2.4	2.2	3.2	4.2	2.4	1.8
5	2.0	2.5	4.0	3.8	3.0	4.3	5.3	2.8	4.0	2.8	5.0	3.5	6.0	4.0	3.0	2.8	4.0	5.3	3.0	2.3
6	2.4	3.0	4.8	4.5	3.6	5.1	6.3	3.3	4.8	3.3	6.0	4.2	7.2	4.8	3.6	3.3	4.8	6.3	3.6	2.7
7	2.8	3.5	5.6	5.3	4.2	6.0	7.4	3.9	5.6	3.9	7.0	4.9	8.4	5.6	4.2	3.9	5.6	7.4	4.2	3.2
8	3.2	4.0	6.4	6.0	4.8	6.8	8.4	4.4	6.4	4.4	8.0	5.6	9.6	6.4	4.8	4.4	6.4	8.4	4.8	3.6
9	3.6	4.5	7.2	6.8	5.4	7.7	9.5	5.0	7.2	5.0	9.0	6.3	10.8	7.2	5.4	5.0	7.2	9.5	5.4	4.1
10	4.0	5.0	8.0	7.5	6.0	8.5	10.5	5.5	8.0	5.5	10.0	7.0	12.0	8.0	6.0	5.5	8.0	10.5	6.0	4.5
STG	0.0	1.0	1.0	2.0	2.0	0.0	0.0	1.0	1.0	1.0	0.0	0.0	0.0	1.0	2.0	2.0	1.0	1.0	0.0	0.0

Fig. 53 Fitness Program - Random

Stamina Program A program with increasing load and two different phases, each with a peak load.

SPEED DATA (MPH)

LEVEL \ PHASE NR.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1	0.5	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	0.5	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	0.5	0.5
2	0.9	1.0	1.2	1.4	1.6	1.8	2.0	2.2	2.4	0.9	1.0	1.2	1.4	1.6	1.8	2.0	2.2	2.4	0.9	0.9
3	1.4	1.5	1.8	2.1	2.4	2.7	3.0	3.3	3.6	1.4	1.5	1.8	2.1	2.4	2.7	3.0	3.3	3.6	1.4	1.4
4	1.8	2.0	2.4	2.8	3.2	3.6	4.0	4.4	4.8	1.8	2.0	2.4	2.8	3.2	3.6	4.0	4.4	4.8	1.8	1.8
5	2.3	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0	2.3	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0	2.3	2.3
6	2.7	3.0	3.6	4.2	4.8	5.4	6.0	6.6	7.2	2.7	3.0	3.6	4.2	4.8	5.4	6.0	6.6	7.2	2.7	2.7
7	3.2	3.5	4.2	4.9	5.6	6.3	7.0	7.7	8.4	3.2	3.5	4.2	4.9	5.6	6.3	7.0	7.7	8.4	3.2	3.2
8	3.6	4.0	4.8	5.6	6.4	7.2	8.0	8.8	9.6	3.6	4.0	4.8	5.6	6.4	7.2	8.0	8.8	9.6	3.6	3.6
9	4.1	4.5	5.4	6.3	7.2	8.1	9.0	9.9	10.8	4.1	4.5	5.4	6.3	7.2	8.1	9.0	9.9	10.8	4.1	4.1
10	4.5	5.0	6.0	7.0	8.0	9.0	10.0	11.0	12.0	4.5	5.0	6.0	7.0	8.0	9.0	10.0	11.0	12.0	4.5	4.5
STG	0.0	1.0	1.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.0	1.0	0.0

Fig. 54 Fitness Program – Stamina

Ramp Program This program has a slowly increasing load. Here you will gradually increase to the top speed for the selected intensity level. Then a cool-down phase begins.

SPEED DATA (MPH)

LEVEL \ PHASE NR.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1	0.5	0.5	0.5	0.6	0.6	0.7	0.7	0.8	0.8	0.9	0.9	1.0	1.0	1.1	1.1	1.2	1.2	0.5	0.5	0.5
2	0.9	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0	2.1	2.2	2.3	2.4	0.9	0.9	0.9
3	1.4	1.4	1.5	1.7	1.8	2.0	2.1	2.3	2.4	2.6	2.7	2.9	3.0	3.2	3.3	3.5	3.6	1.4	1.4	1.4
4	1.8	1.8	2.0	2.2	2.4	2.6	2.8	3.0	3.2	3.4	3.6	3.8	4.0	4.2	4.4	4.6	4.8	1.8	1.8	1.8
5	2.3	2.3	2.5	2.8	3.0	3.3	3.5	3.8	4.0	4.3	4.5	4.8	5.0	5.3	5.5	5.8	6.0	2.3	2.3	2.3
6	2.7	2.7	3.0	3.3	3.6	3.9	4.2	4.5	4.8	5.1	5.4	5.7	6.0	6.3	6.6	6.9	7.2	2.7	2.7	2.7
7	3.2	3.2	3.5	3.9	4.2	4.6	4.9	5.3	5.6	6.0	6.3	6.7	7.0	7.4	7.7	8.1	8.4	3.2	3.2	3.2
8	3.6	3.6	4.0	4.4	4.8	5.2	5.6	6.0	6.4	6.8	7.2	7.6	8.0	8.4	8.8	9.2	9.6	3.6	3.6	3.6
9	4.1	4.1	4.5	5.0	5.4	5.9	6.3	6.8	7.2	7.7	8.1	8.6	9.0	9.5	9.9	10.4	10.8	4.1	4.1	4.1
10	4.5	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0	8.5	9.0	9.5	10.0	10.5	11.0	11.5	12.0	4.5	4.5	4.5
STG	0.0	1.0	2.0	2.0	2.0	2.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.0	0.0	0.0

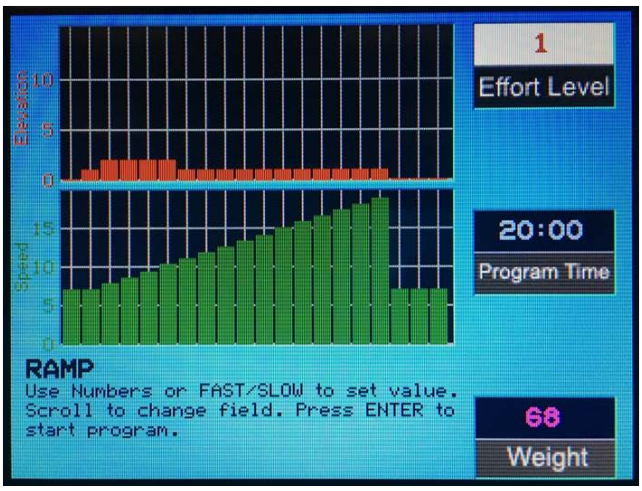


Fig. 55 Fitness Program - Ramp

5 km Program This program is a distance-based program with a simulated 5 km race track. The user determines the running speed by selecting an intensity level.

SPEED DATA (MPH)

LEVEL \ PHASE NR.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1	0.5	0.5	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.5	0.5
2	0.9	0.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	0.9	0.9
3	1.4	1.4	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	1.4	1.4
4	1.8	1.8	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	1.8	1.8
5	2.3	2.3	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	2.3	2.3
6	2.7	2.7	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	2.7	2.7
7	3.2	3.2	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	3.2	3.2
8	3.6	3.6	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	3.6	3.6
9	4.1	4.1	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	4.1	4.1
10	4.5	4.5	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	4.5	4.5
STG	0.0	0.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.0	0.0

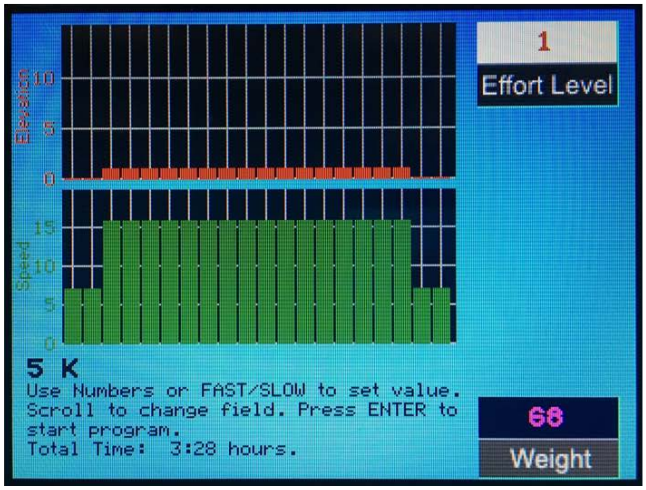


Fig. 56 Fitness Program - 5K

10 km Program This program is a distance-based program with which a 10 km run can be simulated. These programs build endurance.

SPEED DATA (MPH)

LEVEL \ PHASE NR.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1	0.5	0.5	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	0.5	0.5
2	0.9	0.9	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	0.9	0.9
3	1.4	1.4	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	1.4	1.4
4	1.8	1.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	1.8	1.8
5	2.3	2.3	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	2.3	2.3
6	2.7	2.7	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2	2.7	2.7
7	3.2	3.2	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	3.2	3.2
8	3.6	3.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	3.6	3.6
9	4.1	4.1	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	4.1	4.1
10	4.5	4.5	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	4.5	4.5
STG	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

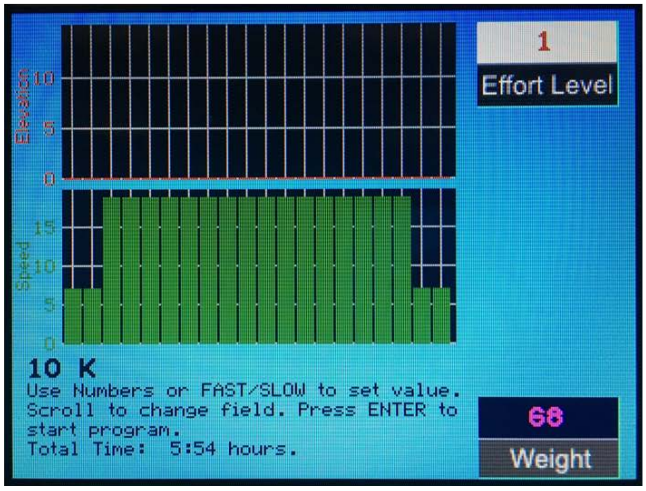


Fig. 57 Fitness Program - 10K

7.9.7 User Programs

Personal Trainer Displays come with the feature that allows the user to customize a personal workout and have it remain on that particular treadmill for future workouts.

Edit Program Name

To help in distinguishing between programs, all program names can be changed (up to 24 characters) directly on the screen. To activate text editing of the workout you plan to customize, proceed as follows:

- Press PAUSE button for about five seconds.
- Use the UP/DOWN incline buttons to scroll from left to right to change text.
- Use the FAST/SLOW speed buttons to scroll through the alphabet.
- Once the program name has been edited, press ENTER to run the program.

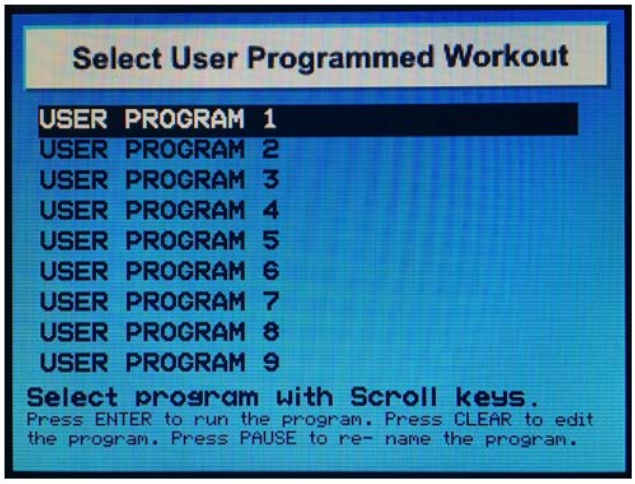


Fig. 58 Edit Program Name Screen

Edit Program

99 user program profiles are available. Each profile consists of 40 parts, each of which has programmable time, speed and incline settings.

Existing programs can be modified and personalized programs can be written, reset, or erased. To edit one of the 99 user programs, proceed as follows:

- Select a user program and press CLEAR button for about five seconds.
- Afterword a beep tone will sound and the screen for editing user programs will be displayed.
- The values can be changed using the number keys or the FAST/SLOW key.
- Scroll to change fields.
- Press ENTER to save the new value and to change to the data for the next part.
- Repeat this process for all 40 existing segments.
- When programming each segment, program in sequential order (do not skip time between segments).
- If the program is less than 40 segments, leave the remainder blank.
- Press PAUSE to reset/erase the current program and write a new program.
- After programming is complete press the OFF button to exit the user program edit screen and to turn off the treadmill.

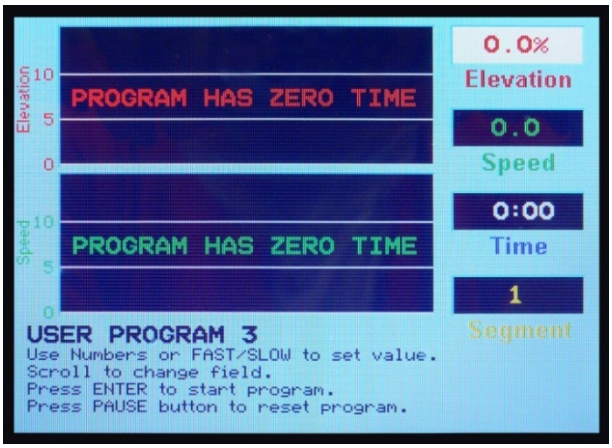


Fig. 59 Edit Program Screen

NOTE
On this screen you must press and hold CLEAR and PAUSE for five seconds.

Run Customized Programs

Once the fitness program has been edited and saved, the user can start training on the customized program.

- Enter user weight and press ENTER to begin program.
- If a number key is pressed while the user is being prompted to make an entry, the program setup begins. The user program associated to this number key is displayed on the LCD display. Then the user can set up the program and begin training. The user does not enter duration for user programs. The training duration is calculated by adding the values stored for the respective part (for this profile).

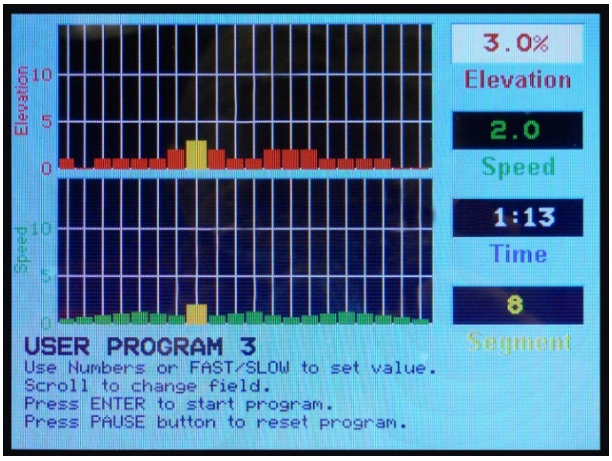


Fig. 60 Example of a Customized Program Screen

7.9.8 Fitness Tests

Balke Fitness Test

This test is designed to determine the user's current fitness level. Using the Balke protocol this program evaluates the functional aerobic capacity (VO2max), with which the cardiorespiratory fitness of the user is determined. Under an increasing load, the oxygen consumption (VO2) eventually reaches a plateau. This is the desired maximum VO2 value.

Set the values for your age and sex using the number keys or the FAST/SLOW key. Scroll to change fields. Press ENTER to start the program.

A chest strap is required for the test. Changing the speed or incline will make the test invalid. The test is terminated when the user's heart rate stabilizes at 130 BPM or at 80% of the user's maximum heart rate (whichever value is lower). Press the FAST key to begin.

The time is automatically set to 20 minutes since the program has 20 program parts. In reality the test is terminated earlier. With this protocol the speed remains constant at 5.5 km/h. The incline in the first minute is 0% and in the second minute 2%. With each following minute the incline increases by 1%.

A fitness value is displayed along with one of the following tables, so that the user can evaluate their level of fitness (fitness value - VO2max value).

Men

	10-19	20-29	30-39	40-49	50-59	60-69	70-79
High	56+	53+	49+	45+	43+	41+	39+
Good	46-55	43-52	39-48	36-44	34-42	31-40	29-38
Average	36-45	34-42	31-38	27-35	25-33	23-30	21-28
Adequate	27-35	25-33	23-30	20-26	18-24	16-22	14-20
Low	27	25	23	20	18	16	14

Women

	10-19	20-29	30-39	40-49	50-59	60-69	70-79
High	53+	49+	45+	42+	38+	35+	33+
Good	41-52	38-48	34-44	31-41	28-37	24-34	22-32
Average	33-40	31-37	28-33	24-30	21-27	18-23	15-21
Adequate	27-32	24-30	20-27	17-23	15-20	13-17	11-14
Low	27	24	20	17	15	13	11

Gerkin Fitness Test

With the Gerkin protocol there is a tiered VO2 test with submaximal values. It is used by the International Association of Fire Fighters to determine fitness for service with the fire department.

Set the values for your age and gender using the number keys or the FAST/SLOW key. Scroll to change fields. Press ENTER to start the program. STOP THE TEST if you do not feel well. This test calculates the fitness, when the heart rate stabilizes at ____ BPM. Then a cool-down phase begins. Do not change the speed or incline. Press the FAST key to begin.

FITTNESS TEST PROTOCOL WORKSHEET:

Name:		Date:	
Resting heart rate:	I.	II.	III.
Resting blood pressure:	I.	II.	III.
Weight:	kg	Training target heart rate (85% of the MHF):	

⚠ CAUTION

Risk of Injury due to Overexertion!

If the person at any time during a test experiences chest pain, dizziness, ataxia, confusion, nausea or cold sweat, the test must be ended immediately.

- Place the heart rate device on the person and give them a towel.
- The heart rate of uniformed personnel is measured continuously throughout the test and in the cool-down phase. The heart rate is retrieved and recorded during the last 15 seconds of each phase.
- If the heart rate of the person exceeds the target training heart rate, continue the test in the phase in which the target training heart rate was exceeded for an additional 15 seconds.
- The test is completed and the final testing phase is given if the heart rate does not return to the target training heart rate (or a lower value) or when the person reaches phase 11.4.
- The VO2max is determined using the retrieved final test phase and the conversion table.
- Record the heart rate after a one minute cool-down.

Operation

PHASE	MINUTE	Speed (mph)	INCLINE (%)	Heart rate (last 15 seconds of the phase)
Warm-up	3 minutes	3.0	0	
1	1	4.5	0%	
2	2	4.5	2%	
3	3	5.0	2%	
4	4	5.0	4%	
5	5	5.5	4%	
6	6	5.5	6%	
7	7	6.0	6%	
8	8	6.0	8%	
9	9	6.5	8%	
10	10	6.5	10%	
11	11	7.0	10%	
Cool-down	1 minute	3.0	0	

PHASE	TIME	CALCULATED VO_{2max}
1	1:00	31:15
2.1	1:15	32:55
2.2	1:30	33:6
2.3	1:45	34:65
2.3	2:00	35:35
3.1	2:15	37:45
3.2	2:30	39:55
3.3	2:45	41:30
3.4	3:00	43:4
4.1	3:15	44:1
4.2	3:30	45:15
4.3	3:45	46:2
4.4	4:00	46:5
5.1	4:15	48:6
5.2	4:30	50
5.3	4:45	51:4
5.4	5:00	52:8
6.1	5:15	53:9
6.2	5:30	54:9
6.3	5:45	56
6.4	6:00	57
7.1	6:15	57:7
7.2	6:30	58:8
7.3	6:45	60:2
7.4	7:00	61:2
8.1	7:15	62:3
8.2	7:30	63:3
8.3	7:45	64
8.4	8:00	65
9.1	8:15	66:5
9.2	8:30	68:2
9.3	8:45	69
9.4	9:00	70:7
10.1	9:15	72:1
10.2	9:30	73:1
10.3	9:45	73:8
10.4	10:00	74:9
11.1	10:15	76:3
11.2	10:30	77:7
11.3	10:45	79:1
11.4	10:00	80

Cooper Fitness Test

Set the values for your age and gender using the number keys or the FAST/SLOW key. Scroll to change fields. Press ENTER to start the program. Run as far as you can in 12 minutes. TO ACHIEVE AN OPTIMAL RESULT THE SPEED MUST BE ADAPTED DURING THIS TEST: Leave the incline at 0%. Press the FAST key to begin.

The test is to find out in how far an athlete can run/walk in twelve minutes. The assistant should round the results off 100 meters.

Standard data for the Cooper test:

Age	Outstanding	Above Average	Average	Below Average	Weak
Male 13-14	> 2700 m	2400–2700 m	2200-2399 m	2100-2199 m	< 2100 m
Female 13-14	> 2000 m	1900-2000 m	1600-1899 m	1500-1599 m	< 1500 m
Male 15-16	> 2800 m	2500-2800 m	2300-2499 m	2200-2299 m	< 2200 m
Female 15-16	> 2100 m	2000-2100 m	1700-1999 m	1600-1699 m	< 1600 m
Male 17-20	> 3000 m	2700-3000 m	2500-2699 m	2300-2499 m	< 2300 m
Female 17-20	> 2300 m	2100-2300 m	1800-2099 m	1700-1799 m	< 1700 m

The following table shows performance evaluations for older athletes:

Age	Outstanding	Above Average	Average	Below Average	Weak
Male 20-29	> 2800 m	2400-2800 m	2200-2399 m	1600-2199 m	< 1600 m
Female 20-29	> 2700 m	2200–2700 m	1800-2199 m	1500-1799 m	< 1500 m
Male 30-39	> 2700 m	2300–2700 m	1900-2299 m	1500-1999 m	< 1500 m
Female 30-39	> 2500 m	2000-2500 m	1700-1999 m	1400-1699 m	< 1400 m
Male 40-49	> 2500 m	2100-2500 m	1700-2099 m	1400-1699 m	< 1400 m
Female 40-49	> 2300 m	1900-2300 m	1500-1899 m	1200-1499 m	< 1200 m
Male > 50	> 2400 m	2000-2400 m	1600-1999 m	1300-1599 m	< 1300 m
Female > 50	> 2200 m	1700-2200 m	1400-1699 m	1100-1399 m	< 1100 m

Rockport Fitness Test

Set the values for your age and gender using the number keys or the FAST/SLOW key. Scroll to change fields. Press ENTER to start the program. Walk 1609 meters (one mile) as fast as you can. TO ACHIEVE AN OPTIMAL RESULT THE SPEED MUST BE ADAPTED DURING THIS TEST: Leave the incline at 0%. You must wear a chest strap or hold on the grips. Press the FAST key to begin.

Conduct Test:

- Record your weight.
- Walk 1609m as fast as possible.
- Record the time for the 1609m walk.
- Record your heart rate after finishing the walk (beats per minute).
- Determine your V="max value using the formula below.

Analysis:

The analysis of the results is to compare the results with the results of previous tests. It can be expected that with appropriate training improvement will be seen between the tests in the analysis.

The formula for the calculation of VO2max value is as follows:

- 132.853 - (0.0769 × Weight) - (0.3877 × Age) + (6.315 × Sex) - (3.2649 × Time) - (0.1565 × Heart rate).

The following applies:

- Weight in pounds (lbs.)
- Sex: male = 1 and female = 0
- The time is given in minutes and hundredths of minutes
- The heart rate is given in beats/minute
- The age is given in years

Female				Male			
Age	**High**	**Average**	**Low**	**Age**	**High**	**Average**	**Low**
18-21	> 45.3	42.7-41.0	> 39.4	18-21	> 56.1	52.4-54.1	< 49.8
20-29	> 40.9	36.7-33.8	> 30.6	20-29	> 48.2	44.2-41.0	< 37.1
30-39	> 38.6	34.6-32.3	> 28.7	30-39	> 46.8	42.4-38.9	< 35.4
40-49	> 36.3	32.3-29.5	> 26.5	40-49	> 44.1	39.9-36.7	< 33.0
50-59	> 32.3	29.4-26.9	> 24.3	50-59	> 41.0	36.7-33.5	< 30.2
60+	> 31.2	27.2-24.5	> 22.8	60+	> 38.1	33.6-30.2	< 26.5

Military Fitness Test

The Military Test programs provide workouts of a preset distance, as required by the Army, Navy, USMC, and USAF. They are used to assess muscular endurance and cardio-respiratory fitness. As the names imply, the object of each test is to complete the run distance as quickly as possible. At the completion of the test, a time-based score (defined by the respective branch of the Military) is returned to the user. Each test begins with a treadmill incline of 1% (best simulates outdoor running).

Army

Using the number keys or FAST/SLOW keys, set your age and gender values. Scroll to change between fields. Press ENTER to start the program.

- Set incline to 0%.
- Press FAST to start.
- Run as fast as possible for 3.2 km (2 miles).
- Adjust the speed during the test to ensure the best score.
- The scoring standards can be found online:
  - http://army.com/info/apft/twomileruntable

Air Force & Navy

Using the number keys or FAST/SLOW keys, set your age and gender values. Scroll to change between fields. Press ENTER to start the program.

- Set incline to 1%.
- Press FAST to start.
- Run as fast as possible for 2.4 km (1.5 miles).
- Adjust the speed during the test to ensure the best score.
- The scoring standards can be found online:
  - http://www.afpc.af.mil/shared/media/document/AFD-110804-054.pdf (USAF)
  - http://www.uscg.mil/sapr/docs/pdf/Fitness%20Assessment%203-28-.pdf (USCG)
  - http://www.public.navy.mil/bupers-npc/support/21st_Century_Sailor/physical/Documents/Guide%205-Physical%20Readiness%20Test.pdf (USN)

Air Force Program, Coast Guard Program, and Navy Program differ only in the way the results are given; Air Force results are given in a point system.

Marines

Using the number keys or FAST/SLOW keys, set your age and gender values. Scroll to change between fields. Press ENTER to start the program.

- Set incline to 0%.
- Press FAST to start.
- Run as fast as possible for 4.8 km (3 miles).
- Adjust the speed during the test to ensure the best score.
- The scoring standards can be found online:
  - http://www.marines.mil/Portals/59/Publications/MCO%206100.13%20W_CH%201.pdf

7.10 Saving Workouts to USB

With the 4Front treadmill, it is possible to save your workout information to a USB stick to review on your computer and track your personal training progress over time. This is possible with the LED Standard display, LED Group Training Display and the LCD Personal Trainer Display. You cannot make your own programs and save them on the USB stick.

- Insert USB stick into USB port beneath 4Front interface display.
- Turn the treadmill ON. The treadmill will begin recording data to the USB from whatever time you insert it into the USB port until you finish training.
- After inserting the USB, the LED display should light up “USB Good” or “USB FOUND” if the USB is compatible.
  - If the USB is incompatible or full, the LED display will light up “USB OFF”.
  - If the USB is incompatible, a different USB will be necessary.
- After completing workout, press the OFF button once and the screen will flash “USB Save”.
- Remove USB after the display powers down.

Uploading Data to Computer

The saved file (.XML format) contains your workout data including workout time, calories burned, distance, speed, pace, incline, vertical feet, heart rate, and METs.

- Plug your USB into the computer.
- Upload the .XML file to a designated folder on your computer.

Excel Importing

View your workout data through any of the following methods:

One method to view your raw workout data and compare multiple training sessions is through Microsoft® Excel.

- Open Excel.
- From the toolbar, select “Data” > “From Other Sources” > “From XML Data Import” option.
- Locate your USB storage device, select a single workout, and click “Open”.
  - A message box may pop up saying that Excel does not recognize the schema. Click “OK” and click “OK” again on the next pop-up.
  - The next screen will appear with all the raw data from your workout.
- To compare another workout, click “Sheet2” at the bottom of the window and follow the above instructions to upload the second workout.

8 Options

8.1 Power Input 208 / 230 V

The input voltage requirements of 208 and 230 V AC are versions for all WOODWAY treadmills. An input power transformer for 208 V AC or 230 V AC has been installed and connected. This does not affect the other parts of the treadmill.

8.2 Body Weight Support Systems

NOTE

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

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

8.3 Reverse Mode (Bi-Directional Belt Control)

NOTE

Reverse mode will only be activated if it was selected upon purchase and in combination with the WOODWAY Fall Protection System.

⚠ WARNING

Do Not Leave Treadmill Unattended While in Reverse Mode!

There is a possibility of personal injury from users stepping onto device while assuming the running surface will move normally.

► Constant supervision is required while the treadmill is in reverse mode.

The incline system is not affected by this option. In the reverse direction, speed is limited to approx. 8 km/h for safety reasons

To use reverse mode, proceed as follows.

- Stop the running surface belt.
- Press the SLOW button for about five seconds while speed is set to 0 km/h.
- Afterwards three short tones will sound.

Now the treadmill is set to reverse mode.

While in reverse mode, the SPEED will be displayed as a negative value (e.g. -2.3 km/h)

If on an LCD Personal Trainer Display, the LCD display will read “Reverse Mode”

To exit reverse mode, proceed as follows.

- Stop the running surface belt.
- Press the SLOW button for about five seconds while speed is set to 0 km/h.
- Afterwards three short tones will sound.

Reverse mode is now deactivated.

8.4 Top Speeds Upgrade

⚠ WARNING

Constant Supervision is Required!

When training at faster speeds, especially from a top speed upgrade, there is an increased chance of injury or damage from falling.

- ► Always supervise users when training at top speed.
- ► Do not train at top speed until you have reached the proper conditioning and training level necessary to train safely.
- ► It is recommended to use WOODWAY body weight support system!

Options are available to increase top speeds depending on the model. These options are mainly used for sports medicine and the training of elite, conditioned athletes (some will require 208/230V) and vary depending on the treadmill model.

8.5 RS-232 Remote Computer Control

This option enables you to switch between the treadmill display and a remote computer for remote control operation. Programs are available from WOODWAY.

WOODWAY treadmills are tested to UL/CSA standards with an Intel DG41RQ computer.

8.6 TV Programming, 4Front/Pro/Pro-XL

To navigate in any menu use the following buttons:

Volume (VOL) Move across the main settings tab on the top of the display and change option values within a menu screen.

Channel (CH) Move up and down the option selections within a menu.

BACK Exit the menus.

ENTER Select an option.

INPUT Change TV input.

To change the TV input, perform the following steps:

- Press the INPUT button.
- Use the CH [+] [-] buttons to move up and down the menu.
- Once you have selected your input source, press the ENTER button.

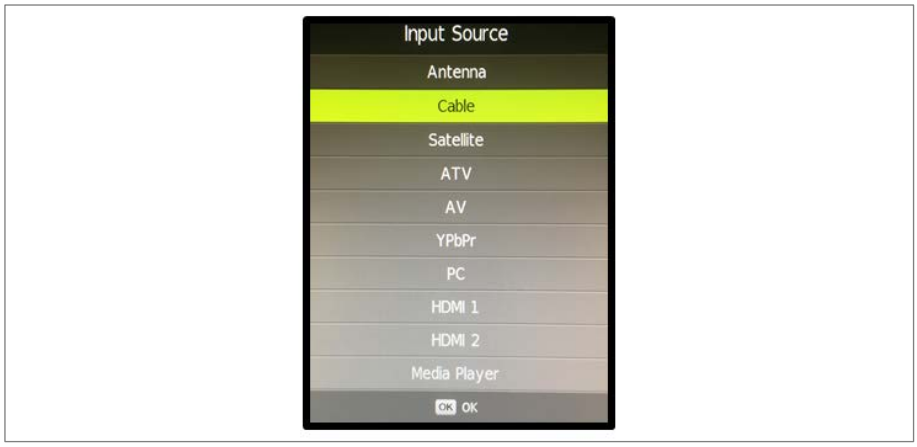


Fig. 61 TV Wire Input

For automatic channel tuning, perform the following steps:

- Press and release the ENTER button and immediately press the BACK button. The setting options menu appears. To move across the main settings tab, press the VOL [+] [-] buttons.

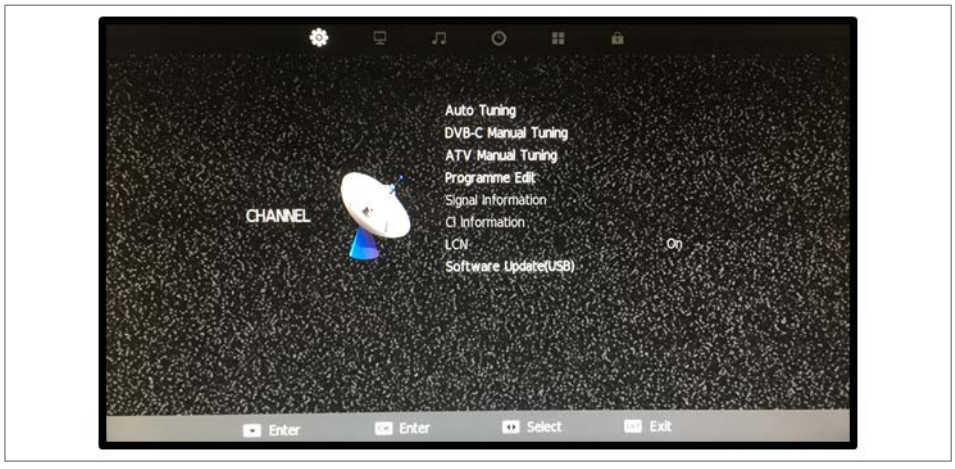


Fig. 62 TV Settings

- Press ENTER button to access the settings options. Use the CH [+] [-] buttons to scroll through the settings.
- Select “Auto Tuning” by pressing the ENTER button.

Fig. 63 TV Auto Tuning

- Select “Scan Mode – Full” by pressing the ENTER button.

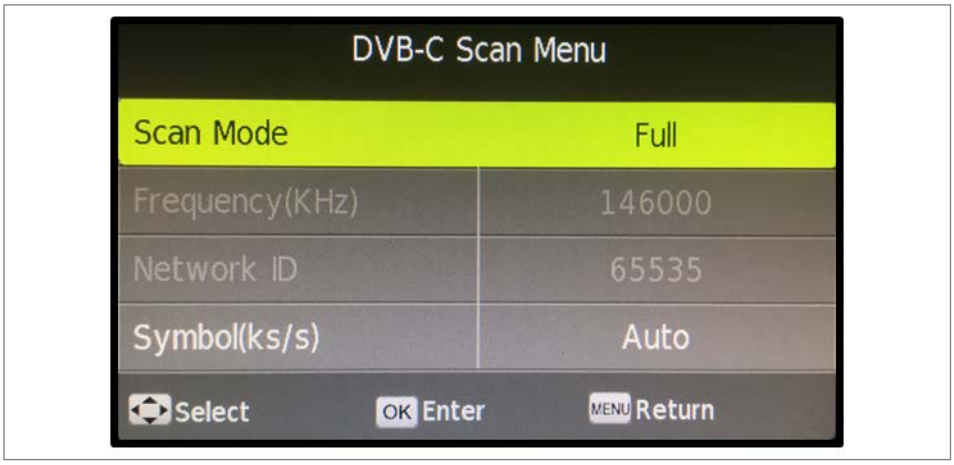


Fig. 64 TV Scan Mode

- Select “Tune Type – DTV + ATV”. Use the VOL [+] [-] buttons to change “Tune Type”.
- Press the CH [-] buttons to move to country selection.

Fig. 65 TV Tune Type

- Navigate with the VOL [+] [-] and CH [+] [-] buttons. Once you have selected your country, press the ENTER button. Channel Tuning will start right after.

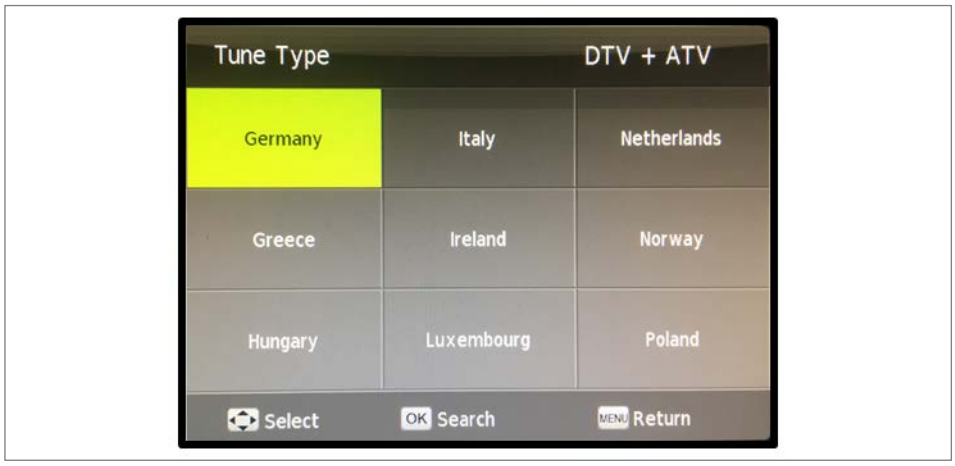


Fig. 66 TV Country Selection

Fig. 67 TV Channel Tuning

To ensure the TV is in the correct input mode, press and hold the ENTER button. A box with the input channel appears for about 15-20 sec.

Fig. 68 TV Channel List

8.7 ProSmart Touchscreen, 4Front/Pro/Pro-XL

The ProSmart Touchscreen is a one-of-a-kind display that personalizes every aspect of the user's experience: User Profiles, Guided Progressions, Real/Game Runs, streaming TV and the ability to customize the UI theme.

WOODWAY designed the ProSmart so that you could step onto any ProSmart enabled treadmill in the world and have access to your profile and information. Our backend STATS website accumulates ProSmart statistics in cloud storage. STATS allow you to track workout history, chart progress and export data to numerous apps or your trainer/coach.

WOODWAY is continually updating and adding new features to ProSmart, we strive to create an ever-improving and robust platform based off customer input and our forty plus years of experience. Smart treadmills will be commonplace in the future, at WOODWAY the future is now with ProSmart Touchscreen Display.

Fig. 69 ProSmart Touchscreen 10.1"

Fig. 70 ProSmart Touchscreen 21"

NOTE
A separate manual is supplied with the ProSmart Touchscreen!

8.8 Accessories and Services

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

Will the accessories fit?

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

Description	Order no.
POLAR® Chest Strap For heart rate measurement (consisting of Polar® T34 chest strap + transmitter)	11500320 / 321
Fall protection system with harness and emergency stop	Order no. according to the model, please enquire
Reverse Mode (Bi-Directional Belt Control)	please enquire
Emergency Stop Magnet with Pull Cord	please enquire
Serial Port RS232 with Software (4Front, Mercury, Path, Pro, Pro XL)	161500018
Protective Treadmill Floor Mat 2000x1000x8 mm	161500010
Jump Plate (Pro and Pro XL)	161500016
Push Bar (4Front non-TV versions)	161500048 161500049
Custom Color	please enquire
WOODWAY Buy-Back Program This entails having your treadmill bought by WOODWAY between the first and fifth year of use. WOODWAY will offer you a different price depending on the year.	please enquire
WOODWAY Factory Renewal Program This entails having your treadmill shipped back to WOODWAY (WOODWAY can coordinate these details; cost is additional). Your treadmill will then be thoroughly renovated by a qualified WOODWAY Service Technician. Any worn/outdated features will be replaced. The treadmill will then carry a one (1) year parts and labor warranty. It's like getting a brand new WOODWAY at a fraction of the cost.	please enquire

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, this may cause material damage and serious injury.

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

9.1 Cleaning

⚠ DANGER

Danger of death by electric shock!

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

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

The running surface 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 solvents for cleaning.
- Clean all surfaces with a non-abrasive, mild detergent diluted with water to 50/50.
- To avoid damage to component surfaces, observe the instructions for detergent use.

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.

9.2.1 Weekly Maintenance

- Clean handrails, display and side panels with a damp cloth.
- Disinfect railings and controls.
- Clean the running surface with a damp, lint-free cloth.
- Visual check the power cord for damage.
- Check the wires to the controls.
- Inspection of the treadmill for mechanical damage.
- Checking mounting of all.
- 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.

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

ATTENTION
If there are 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.

9.2.3 Semi-Annual Maintenance

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

A repair must take place:

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

9.2.4 Annual Maintenance

ATTENTION

The proper maintenance of the treadmill must take place annually by not doing so; the warranty of the product is not applicable.

Maintenance and repairs may only be carried out by trained and authorized personnel.

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.
- Lubrication (see sec. 9.3 page 97).

NOTE

It is recommended to enter maintenance and repairs in the Maintenance Report (see sec. 12, page 108).

9.3 Lubrication

9.3.1 Bearings

Almost all bearings in the treadmill have been lubricated by the manufacturer and must not be greased. The four (4) bearings at the front and rear axle must be lubricated once a year with one stroke of the grease gun with a flex bit.

The side panels must be removed for lubrication.

Fig. 71 Lubrication, Axle bearing

9.3.2 Running Surface Belt, Drive Axle

The teeth on the bottom of the tread belt are sufficiently lubricated in the factory to minimize noise. The teeth do not need to be lubricated. When the running surface belt rubs on the side of the guide rollers, the use of a small amount of lubricant (Molykote or similar product) on the edges of the slats can contribute to noise reduction. To ensure correct tread belt alignment, apply grease to the teeth on the rear driving axle.

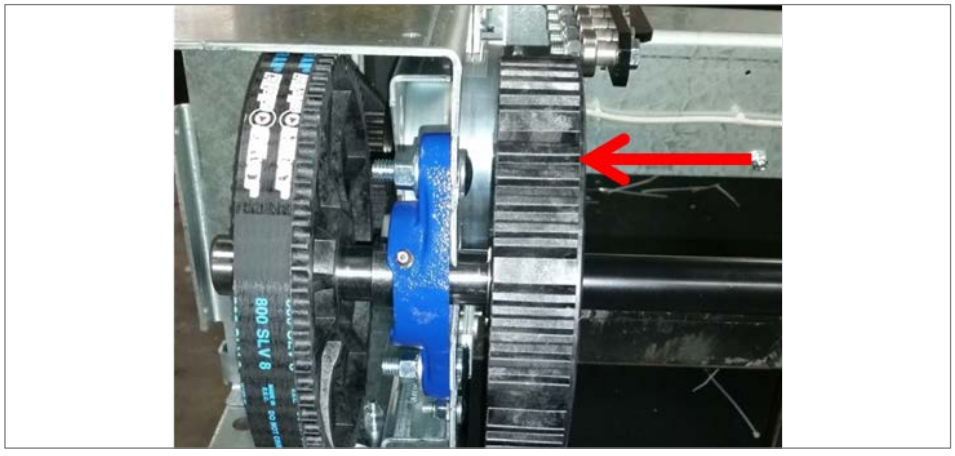


Fig. 72 Lubrication, Drive Axle

9.3.3 Drive Belt

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 squeaking of the belt. Lubricant should be used sparingly.

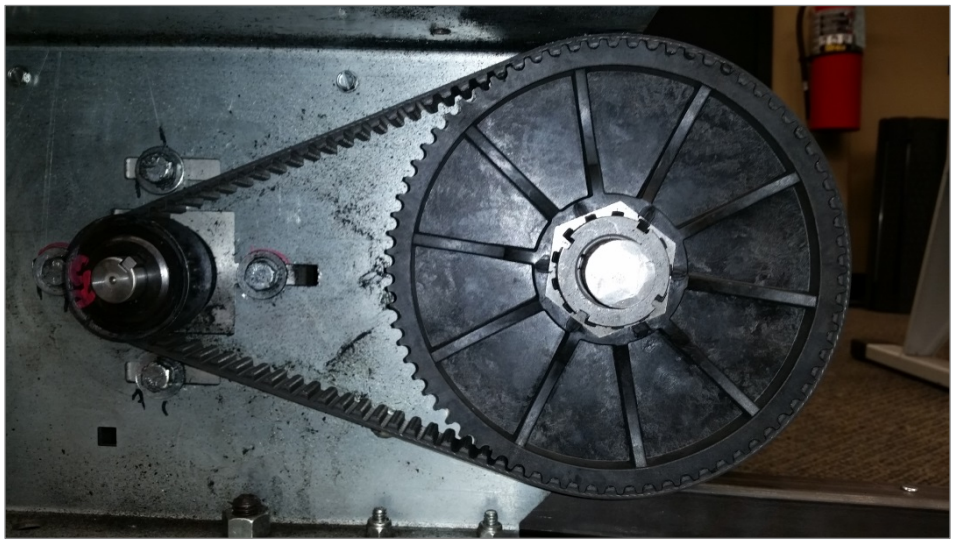


Fig. 73 Toothed Belts

9.3.4 Incline System

The incline systems on WOODWAY treadmills are lubricated by the manufacturer. The system must be checked when used over several hours or in a very dusty environment. If required, apply a small amount of lubricant to the chain and the incline drive racks.

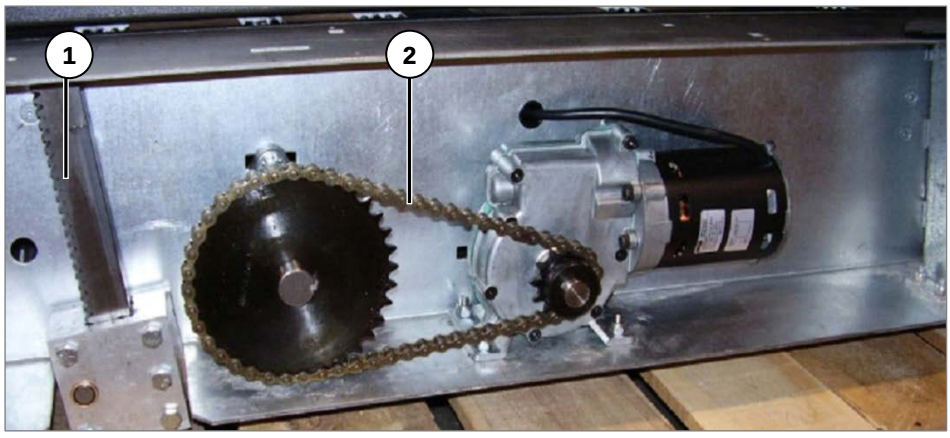


Fig. 74 Incline System

1. Incline toothed rack.
2. Incline chain.

NOTE

Use a minimum amount of lubricant to prevent excess dirt and debris from sticking to the device after cleaning.

9.4 Adjusting and Calibrating

9.4.1 Incline System

The incline system with toothed rack and gear drive is used on WOODWAY treadmills. For systems with an incline of 15% to 25% similar components are used. They only differ with respect to the movement of the toothed rack.

9.4.2 Handrails

Inspect/tighten all hardware. Replace any hardware that is stripped or missing. Inspect the handrail clamps for damage (e.g. cracks).

9.4.3 Bearing Rails

Remove 2 running belt slats to access the bearing rail assemblies. Clean the bearing rails and replace any bearings that are causing noise or that do not spin freely.

9.4.4 Treadmill Support Feet

When the treadmill wobbles or seems unstable, the support feet must be checked (see sec. 6.3.1 page 37).

NOTE

When the treadmill is moved the frame may bend. If the treadmill seems to wobble, press down on the railing on either side. This can realign the railing without making a support foot adjustment necessary.

9.4.5 Running Surface Belt

The running surface belt does not usually need adjustment. However, when the running surface belt or corresponding parts are replaced the belt tension must be checked.

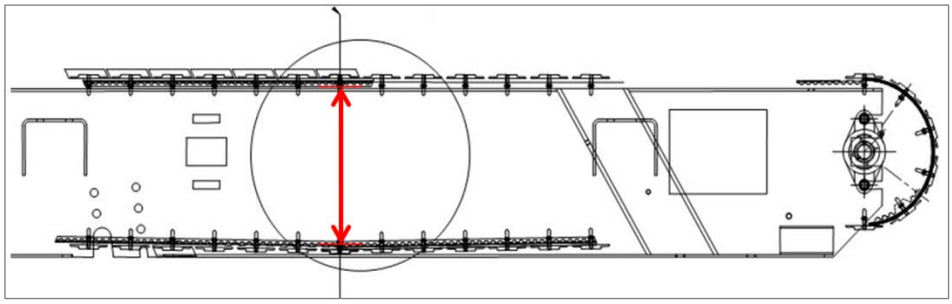


Fig. 75 Measuring Running Surface Belt

Treadmill	Approximate Distance from Tooth to Tooth at the Center of the Treadmill
Path	20,9 cm
4Front / Mercury	21,6 cm
Pro	22,3 cm
Pro XL	22,9 cm
ELG	41,9 cm

9.4.6 Calibrating Belt

When the treadmill is set to 0 km/h, the belt may move slightly due to electrical variance. It is possible to adjust this movement through the treadmill display board. The procedure for calibrating belt movement differs slightly between models.

LED Standard Display / LED Group Training Display

To adjust the belt movement of your treadmill through the LED display, perform the following steps:

- Turn the treadmill OFF and back ON again by the main power switch.
- Hold down the INCLINE UP button and press the ON button on the display board. Release both buttons.
- Press the INCLINE UP button until the display reads “bCrP”.
- Use either FAST/SLOW key to stop the belt movement.
- Once the belt is stopped, press the PAUSE button to save the changes. Turn the treadmill OFF at the main power switch to exit calibration mode.

LCD Personal Trainer Display

To adjust the belt movement of your treadmill through the color LCD display, perform the following steps:

- Turn the treadmill OFF and back ON again by the main power switch.
- Press the ON button on the display board.
- Press 9-2-2-ENTER (in that order).
- Press either UP/DOWN incline key to stop the belt movement. Do not press the keys too fast, as the treadmill may not respond.
- Once the belt is stopped, press the OFF button twice to save the changes and exit calibration mode.

If these directions do not match for your display, you may have an older version. If so, call our customer service for assistance (see sec. 1.5 page 8).

9.5 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

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.

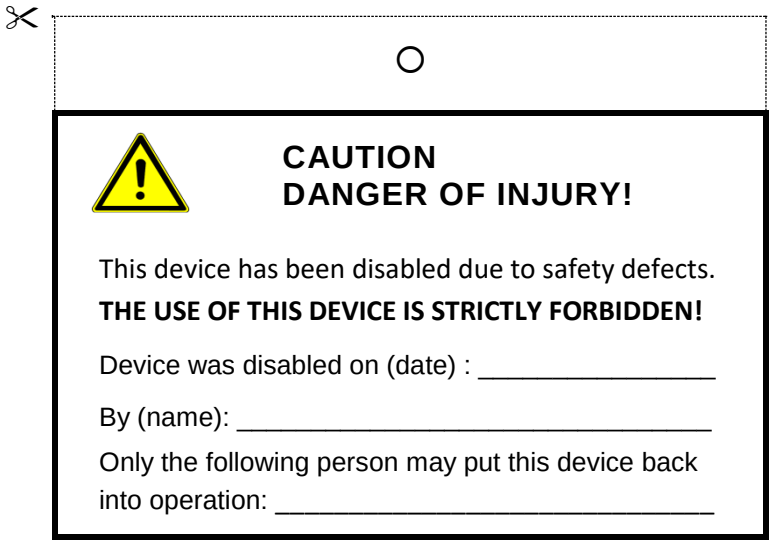
The disabling of the treadmill must be such that an unintentional and/or unauthorized restart can be ruled out and that the name of person who is authorized to put the treadmill back into operation can be seen.

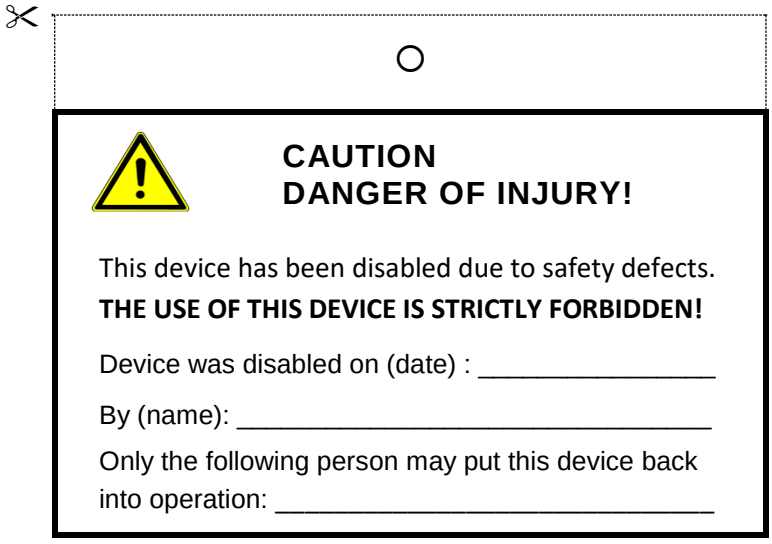
The removal of the power plug from the outlet alone is not sufficient for the disabling of the treadmill, since third persons who have not been informed about the disabling could plug the treadmill back into the power supply and use it.

The following measures must therefore be taken to disable a WOODWAY medical treadmill:

- The unit must be turned off and the power plug must be unplugged from the wall socket (disconnected).
- 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.
- It must be determined which authorized person - possibly after maintenance and repairs - may start up the treadmill again.
- 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.
- Apply the second safety label to the plug of the power cord.

9.5.1 Labels for Disabling a Treadmill





9.6 Device Fuses

The fuses must comply with the technical specifications (see sec. 3.6 page 23). Bridging the fuses is prohibited (risk of electric shock, fire risk).

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

Fig. 76 Device fuses

10 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.

For inquiries have the following information handy:

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

10.1 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 (also see "running surface belt") rubs against the pulley guides, thus producing whistling sounds. In this case, the use of a small amount of lubricant (Molykote or similar product) applied to the edges of the endless belt can contribute to noise reduction. Do not use too much grease, as this only leads to unnecessary accumulation of dust and dirt.

Toothed Belt Drive System

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

Bearings

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

10.2 No Display

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

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

10.3 Running Surface Does Not Move

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

- Is the safety magnet activated? Try to reposition the magnet.
- Check if the running surface belt is blocked by an object and if so, remove.
- Unplug the treadmill and wait at least 60 seconds before reconnecting it to a power supply.

10.4 Free Moving Running Surface

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.

10.5 Incline Does Not Function

- Check whether incline motor makes noises (brake stuck/motor has stopped).
- Check whether the incline limit switch has been tripped.
- Check whether the chain is broken or has slipped from the sprocket.
- Check whether the potentiometer is set properly.

10.6 Irregular or Flashing Display

- Low line voltage.
- Excessive load on the line.
- Ensure that the treadmill is connected to a separate power line.

10.7 Electrostatic Discharge

Due to the movement of the runner on the device, the runner can become electrostatically charged. Touching a metal part in this state, it may cause electrostatic discharge from the user to the device. Electrostatic discharges may cause malfunction of the device. For the user and the device such discharges are normally harmless. The most common cause of electrostatic charge is the choice of clothing and the condition of the soles of the shoes as well as very dry air.

It is recommended to try other clothing and footwear and humidify the room with commercially available humidifiers if you have very dry air.

10.8 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.

10.9 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.

11 Disposal Notice

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.
- 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.

Do not put batteries into the house waste after use. Dispose of them at a battery collection point.

12 Maintenance Report

DATE	MAINTENANCE MEASURES	FROM	REMARKS

13 Table of Figures

Fig. 1 EC Declaration of Conformity 9
Fig. 2 Example of 4Front Name Plate 16
Fig. 3 Ports to insert carrying poles 26
Fig. 4 Carrying poles 26
Fig. 5 Power console 32
Fig. 6 Set-up, Clearances 36
Fig. 7 Removing Side Panel 37
Fig. 8 Feet Height Adjustment 37
Fig. 9 4Front Assembly, Side Panel 39
Fig. 10 4Front Assembly, Wiring 39
Fig. 11 4Front Assembly, Tube Mount 39
Fig. 12 4Front Assembly, Inserting Tubes 40
Fig. 13 4Front Assembly, Connection 1 40
Fig. 14 4Front Assembly, Connection 2 40
Fig. 15 4Front Assembly, Connection 3 40
Fig. 16 4Front Assembly, Fixing the Railing 41
Fig. 17 4Front Assembly, Side Panel 41
Fig. 18 Mercury/Path Assembly, Side Covers 42
Fig. 19 Mercury/Path Assembly, Electronic Cover Plate 42
Fig. 20 Mercury/Path Assembly, Wiring 42
Fig. 21 Mercury/Path Assembly, Tube Mount 43
Fig. 22 Mercury/Path Assembly, Insert Tubes 43
Fig. 23 Mercury/Path Assembly, Connection 1 43
Fig. 24 Mercury/Path Assembly, Connection 2 43
Fig. 25 Mercury/Path Assembly, Connection 3 44
Fig. 26 Mercury/Path Assembly, Connection 4 44
Fig. 27 Mercury/Path Assembly, Fixing the Railing 44
Fig. 28 Mercury/Path Assembly, Electronic Cover Plate 44
Fig. 29 Mercury/Path Assembly, Side Covers 45
Fig. 30 Mercury/Path Assembly, Cover Plates 45
Fig. 31 Pro/ProXL Assembly, Insert Railing 46
Fig. 32 Pro/ProXL Assembly, Connecting Railing 46
Fig. 33 Pro/ProXL Assembly, Screwing Railing Together 46
Fig. 34 Pro/ProXL Assembly, Connection 1 47
Fig. 35 Pro/ProXL Assembly, Connection 2 47
Fig. 36 Pro/ProXL Assembly, Connection 3 47
Fig. 37 Pro/ProXL Assembly, Fixing the Railing 1 47
Fig. 38 Pro/ProXL Assembly, Fixing the Railing 2 48
Fig. 39 Pro/ProXL Assembly, Side Covers 48
Fig. 40 Chest Strap with POLAR Transmitter 53
Fig. 41 ON/OFF switch 54
Fig. 42 Standard Display I 56
Fig. 43 Standard Display II 56
Fig. 44 Group Training Display 58
Fig. 45 Personal Trainer Display I 60
Fig. 46 Personal Trainer Display II 60
Fig. 47 User Defined Track 62
Fig. 48 Fitness Programs Menu 63
Fig. 49 Fitness Program - Goal 67
Fig. 50 Fitness Program - Weight Loss 68
Fig. 51 Fitness Program - Aerobic 69
Fig. 52 Data Entry - Interval 70
Fig. 53 Fitness Program - Random 71

Table of Figures

Fig. 54 Fitness Program – Stamina 72
Fig. 55 Fitness Program - Ramp 73
Fig. 56 Fitness Program - 5K 74
Fig. 57 Fitness Program - 10K 75
Fig. 58 Edit Program Name Screen 76
Fig. 59 Edit Program Screen 77
Fig. 60 Example of a Customized Program Screen 77
Fig. 61 TV Wire Input 87
Fig. 62 TV Settings 87
Fig. 63 TV Auto Tuning 88
Fig. 64 TV Scan Mode 88
Fig. 65 TV Tune Type 89
Fig. 66 TV Country Selection 89
Fig. 67 TV Channel Tuning 89
Fig. 68 TV Channel List 90
Fig. 69 ProSmart Touchscreen 10.1” 91
Fig. 70 ProSmart Touchscreen 21” 91
Fig. 71 Lubrication, Axle bearing 97
Fig. 72 Lubrication, Drive Axle 97
Fig. 73 Toothed Belts 98
Fig. 74 Incline System 98
Fig. 75 Measuring Running Surface Belt 99
Fig. 76 Device fuses 103