

Small Animal Treadmill sensory motor



Key Features

- High performance motor
- Silent operation, even at high speeds
- Accurate control of shock intensity
- Computer interface included
- Negative slope option
- Easy to clean

Parameters Measured

- Total distance covered
- Distance covered at each moment
- Accumulated shock time per animal
- Number of contacts with the shock grid

Components Included

- Treadmill unit with RS-232 port
- Allen key
- SeDaCom software
- Cables and connectors
- Instruction manual
- Set of spare fuses
- 2 year warranty

Options

- LE7000 thermal printer
- TREAD-01 software to control up to 10 treadmills
- LE87XXCO air tight option for calorimetry studies (available only on single lane models)



Small Animal Treadmill

Panlab/Harvard Apparatus Treadmills are rolling belts with an adjustable speed and slope, enabling forced exercise training and accurate testing of fatigue in rodents. Different models are available depending on the user's needs from one to five lanes/animals.

These Treadmills have an adjustable speed (up to 150 cm/s) and slope (from -25 to +25 degrees) and a control Unit. The rolling belt is built with specially selected materials to guarantee the best performance under conditions of intensive use and the minimum operations of maintenance, as well as simplicity in keeping it clean. The lanes (corridors of activity for the animal) have sufficient width for the subject to correct its errors in coordination, thereby allowing an exact measurement of the fatigue without deficiencies in motor coordination.

The unit controls the speed of the belt, shows measured data in its display, provides current to the shocking grid and allows communication with the PC for data storage, via the RS-232 output and SeDaCom software. Belt velocity can also be controlled by software. Parameters measured in a trial are: belt speed and slope, distance travelled, shock time, and shock intensity.

The electrical shock supplied by the grid is of constant intensity (from 0 to 2 mA), that is, the current which circulates through the animal (and therefore its effect) only depends on the value of the mA chosen and not of the subject (quantity of body mass in contact with the bars, perspiration, etc.)

The apparatus can optionally be provided with an air isolated enclosure for respiratory metabolism studies - single lane versions only.

Small Animal Treadmill (continued)



Previous



Next

Table of Contents

Product Index

Search

WWW Home

Contact Us

Specifications

Current Range	Adjustable from 0 to 2 mA
Belt Speed	Adjustable from 0 to 0.6m/sec
Running Surface	450 mm long x 100 mm wide
Running Lanes	1, 2, or 5, depending upon model selected
Shock Grid	190 mm long x 100 mm wide
Slope Adjustment	From 0° to 25° (negative slope also available upon request)
Computer Requirements	PC (Windows 95, 98, ME, NT, 2000 and XP)
Maximum Number of Stations	1 per computer with SeDaCom. up to 10 units with Tread-01 Software
Certifications	CE compliant
Power Requirements	110V or 220V, 50/60Hz

Model	Product	Order #
LE8700	Rat Single Lane Treadmill Including Shock Source and SeDaCom Software	BH1 76-0303
LE8708	Mice Single Lane Treadmill Including Shock Source and SeDaCom Software	BH1 76-0304
LE8715	Rabbit Single Lane Treadmill Including Shock Source and SeDaCom Software	BH1 76-0305
LE8706	Rat Double Lane Treadmill Including Shock Source and SeDaCom Software	BH1 76-0306
LE8709	Mice Double Lane Treadmill Including Shock Source and SeDaCom Software	BH1 76-0307
LE8710R	5 Lanes Treadmill for Rats, Including Shock Source and SeDaCom Software	BH1 76-0308
LE8710M	5 Lanes Treadmill for Mice, Including Shock Source and SeDaCom Software	BH1 76-0309

Options

LE 87XXCO	CO Air Tight Option (Only Available for LE8700, LE8708 and LE8715)	BH1 76-0310
TREAD-01	PC-Software to Control up to 10 Treadmills	BH1 76-0311
LE 7000	Thermal Printer	BH1 76-0114
LE8740R	LE8710 Lead for Rats	BH1 76-0312
LE8740M	LE8710 Lead for Mice	BH1 76-0313
LE8730R	LE8710 Grid for Rats	BH1 76-0314
LE8730M	LE8710 Grid for Mice	BH1 76-0315

Citations

Serradj N and Jamon M (2007) Age-related changes in the motricity of the inbred mice strains 129/sv and C57BL/6j. *Behavioral Brain research* 177(1): 80-89. (mouse, France)

Suvelles M et al. (2007) uPA deficiency exacerbates muscular dystrophy in MDX mice. *The Journal of Cell Biology* 178(6):1039-51. (Mouse, Spain)

Alonso M et al. (2006) Melatonin inhibits the expression of the inducible isoform of nitric oxide synthase and nuclear factor kappa B activation in rat skeletal muscle. *J. Pineal Res. In Press*

Billat V et al. (2005) Inter- and intrastrain variation in mouse critical running speed. *J. Appl. Physiol.* 98: 1258-1263. (mice, France).

Majczynski H et al. (2005) Serotonin-Related Enhancement of Recovery of Hind Limb Motor Functions in Spinal Rats after Grafting of Embryonic Raphe Nuclei. *J. Neurotrauma.* 22(5): 590-604. (Rat, Poland)