

## Automatic Small Animal Treadmill

### General

MazeRouter provides a complete solution enabling forced exercise training and accurate testing of fatigue in rodents. Different treadmill models are available depending on the user's needs (manual and Automatic in 1/5/10 lane).

Basically, the treadmill apparatus consists of a rolling belt with adjustable speed (2 ~ 80 m/min) and slope (from -20 to 20 degrees) and a control unit with touch screen and large graphical LCD display.

The treadmill unit controls the speed of the belt, shows measured data in its display (belt speed, distance travelled, number of shocks and accumulated duration) and provides adjustable electrical shock to the grid.

The electrical shock supplied by the grid is of constant intensity (from 0.1 to 9.9 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 rolling belt is built with especially selected materials to guarantee the best performance under conditions of intensive use and the minimum operations of maintenance.

The lanes 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.

### Main Features:

- ▶ Touch screen micro-processor controller
- ▶ Plexiglass restrainer
- ▶ Rolling belts with adjustable speed and slope
- ▶ Silent operation, even at high regimes
- ▶ Electrical adjustable slope of rolling belt
- ▶ Accurate control of the intensity of the shock delivered
- ▶ Positive and negative slope
- ▶ Easy to clean

### Applications:

Improvement of sportive human performances, Exercise, Fatigue, Oxidative stress, Respiratory metabolism (O<sub>2</sub>/CO<sub>2</sub>), Diabetes, Parkinson, Ischemia, Osteopenia/osteoporosis...

