

ROTOR-ROD™

The most powerful system for motor function in rats and mice



ROTOR-ROD Station with Rat Cart

PRODUCT OVERVIEW

The ROTOR-ROD System measures motor function, motor learning, coordination, and equilibrium in both rats and mice. ROTOR-ROD software allows the user to construct a speed control ramp of their own design. ROTOR-ROD is designed with adjustable falling heights from 18 - 48 inches to utilize the 'fear of falling' instinct as a natural motivator. ROTOR-ROD is available in three configurations: a model for mice, a model for rats and a combination model for both rats and mice. Each model features four independently timed lanes that automatically record all latencies, distance traveled and RPM at time of fall. Secured enclosures prevent the subjects from escaping after a safe landing.

HOW IT WORKS

With the ROTOR-ROD software active, the rod remains locked for easy placement. Up to four animals can be placed on the rod within their individual lanes. Once all animals are placed, the "Start" button is pressed and the rod begins rotating. The rotation is controlled by a speed control ramp previously defined by the user. The speed control ramp is constructed of segments that are accelerating, constant or decelerating in any mix. This feature allows the construction of straight line acceleration speed control ramps, constant speed control ramps and varying speed control ramps. This feature allows the construction of the much

Features & Benefits

- » Utilizes the "fear of falling" instinct as a natural motivator
- » Adjustable falling heights from 18 - 48 inches
- » Ability to run the system on a laptop or desktop computer
- » Automatically records fall latencies, distances traveled, and RPM at time of fall
- » Secured enclosure prevents animals from escaping after a safe landing
- » Rod speed ramps can be any combination of constant, accelerating and decelerating segments
- » All study data are stored in a database, providing quick and easy export

desired stair step style ramp. You can use as many segments as will fit in the maximum run time of 1000 seconds. Seven photobeams are embedded in each of the four lanes of the ROTOR-ROD enclosure. One to four lanes can be used for testing. When each animal falls from the rotating rod, the photobeams are broken and the ROTOR-ROD software records the animal's latency to fall, distance traveled and RPM of the rod at the fall. The ROTOR-ROD can be set to stop when the last animal falls or when a preset duration is reached. Alternatively the user can stop the test at any time by pushing the Stop button. ROTOR-ROD utilizes a database to store all study results in a single file (table) format ready for export. This eliminates the need to cut and paste multiple files together in order to export study results to statistical packages.

ROTOR-ROD COMPONENTS

- › Enclosure with 4 independently timed lanes
- › Optional rat cart for increased falling height
- › Software
- › User Manual
- › All cables and connectors

ROTOR-ROD SYSTEM SPECIFICATIONS

Outside Dimensions	Rat: 66" (H) x 36" (W) x 24" (D) Mouse: 33" (H) x 36" (W) x 24" (D)
Lane Dimensions	4.5" (W) each
Rod Diameter	1.25" (mouse), 2.75" (rat)
Fall Height	18" for mice, up to 48" for rats
Material Composition	ABS and Acrylic
Maximum # of Stations	1 (4 animal lanes)
# of Photobeams	7 per lane
Photobeam Spacing	.5"
Speed Range	0 to 50 RPM

ROTOR-ROD COMPUTER REQUIREMENTS

Windows 7/Windows 10 compatible computer systems with one USB port. Minimum disk and memory sizes specified to support Windows 7/Windows 10 are acceptable.

SDI CONFIGURED COMPUTERS

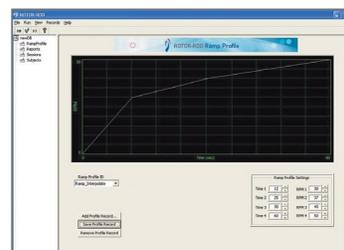
SDI offers high performance Configured Computers that are pre-installed with the Windows® operating system, USB Drivers and applicable SDI software. Each computer is fully tested with your system prior to shipment. When your SDI system arrives, all you have to do is unpack it, attach the cables and begin testing.

FOR MORE INFORMATION

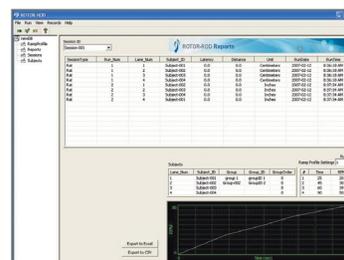
To learn more about SDI behavioral testing systems, please visit www.sandiegoinstruments.com. If you have any questions or would like to request a quote please call (858) 530-2600 or email us at sales@sandiegoinstruments.com.

SDI MOTOR & SENSORY TEST SYSTEMS

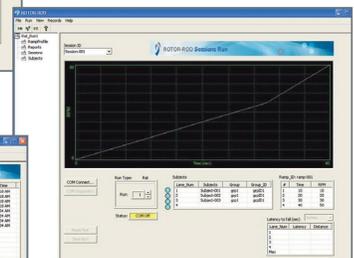
- › Animal Grip Strength System
- › Rotor-Rod™



Ramp Profile Screen



Reports Screen



Sessions Run Screen



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