

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 takes full advantage of the Windows® operating system with data organization and management software that combines power and flexibility with ease of use. 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 fall latencies and distances traveled. Secured enclosures prevent the subjects from escaping after a safe landing. User defined rod speeds can be constant, accelerating or varying accelerations/decelerations.

HOW IT WORKS

Up to four animals are placed on the rod within their individual lanes in the ROTOR-ROD enclosure. The ROTOR-ROD animal compartments are completely enclosed to prevent the animals from escaping. Once all animals are placed, the ROTOR-ROD "Start" button is pressed and the rod begins rotating.

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 and distances traveled
- Secured enclosure prevents animals from escaping after a safe landing
- Rod speed ramps can be any combination of constant, accelerating and decelerating
- All study data is stored in a database, providing quick and easy export

The rotation is controlled by an acceleration ramp previously defined by the user. 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. 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

- Enclosures with 4 independently timed lanes
- Optional rat cart increases falling distance up to 48 inches
- Photobeams
- Software
- User Manual
- All cables and connectors



ROTOR-ROD SYSTEM SPECIFICATIONS

Outside Dimensions	66" (H) x 36" (W) x 24" (D) (rat); 33" (H) x 36" (W) x 24" (D) (mouse)
Lane Dimensions	4½" (W) per animal
Rod Diameter	1¼" (mouse); 2¾" (rat)
Fall Height	18" for mice, 48" for rats
Material Composition	ABS with acrylic windows
Maximum # of Stations	4 animal compartments
# of Photobeams	7 per lane, 28 total
Photobeam Spacing	½"
Speed Range	0 to 50 RPM

ROTOR-ROD COMPUTER REQUIREMENTS

Windows XP/Windows 7 compatible computer system with serial port. Minimum disk and memory sizes specified to support Windows XP/Windows 7 are acceptable.

SDI CONFIGURED COMPUTERS

SDI offers high performance Cobalt™ Configured Computers that are pre-installed with the Windows® operating system and applicable SDI software. If required, SDI will pre-install PC Interface cards and all relevant drivers. 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.

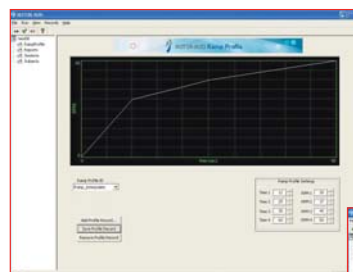
FOR MORE INFORMATION

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.

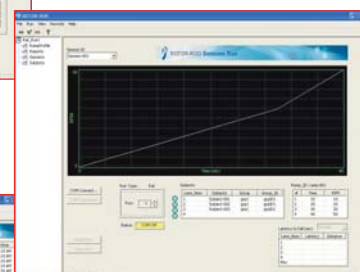
To view the online Rotor-Rod overview presentation, please visit: sandiegoinstruments.com/presentations.

SDI MOTOR & SENSORY TEST SYSTEMS

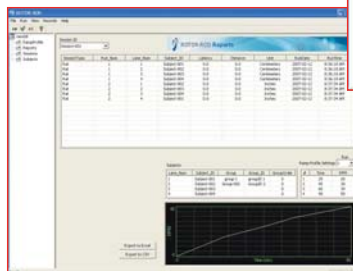
- Animal Grip Strength System
- Hotplate Analgesia Meter
- Hot/Cold Plate Analgesia Meter
- Rotor-Rod™
- Tail Flick Analgesia Meter
- Pressure Analgesia Meter



Ramp Profile Screen



Sessions Run Screen



Reports Screen



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