



Rat Rota-Rod

Cat. No. 47700

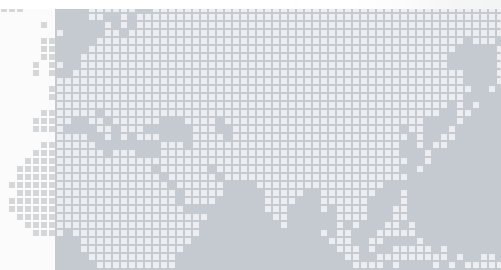
General

The "Rota-Rod" technique has been originated by a 1957 paper of N.W Dunham and T.S Miya and has proved to be of great value in research involving screening of drugs which are potentially active on motory co-ordination.

The **Ugo Basile Rota-Rods** are the result of many years of re-search in co-operation with the latest development in behavioural and pharmacological research.



- THE ORIGINAL ROTA-ROD: THOUSANDS OF CITATIONS SINCE THE 1960s!
- THREE OPERATION MODES: CONSTANT SPEED, ACCELERATING OR ROCKING



Main Features

- Adjustable speed (2-80 rpm) and acceleration ramp (6"- 600")
- Tilttable graphic display for optimal reading
- PC Interface: serial and USB (via the adaptor provided)
- Computer compatibility: direct connection to a PC (via the dedicated software included as standard)

General

The new Ugo Basile Rota-Rod replaces both previously available constant speed and accelerating models. They basically consist of four 6 cm diam. drums, suitably machined to provide grip. Five flanges divide the drums, enabling four rats to be on the treadmill simultaneously.

When a rat falls off its cylinder section on to the plate below, the plate trips thereby recording the animal's endurance time in seconds.

A large, very readable backlit graphic display shows the actual angular speed (RPM). At the end of a run, the display shows for each animal the running time and the instrument rotation speed at the time that animal fell off.

The panel can be oriented to select the most comfortable angle for the operator, to avoid glare, etc.

The main features, digitally preset by function keys are the following:-

- the angular speed can be preset in the range 2-80 RPM
- in the acceleration mode, the change of speed can be preset in 6 second-10 minute interval in 6 second steps.
- reverse rotation can be selected, which takes place at minimum speed, at the end of a programmable acceleration-deceleration sequence.
- a rocking motion is also presettable, with adjustable angular amplitude, speed and acceleration.

Data Acquisition

The 47700 is microprocessor controlled and features direct PC output. Internally-stored data can be routed via a 9-pin D-type connector to the PC serial port (RS232).

Data output is managed by 52050-07 Data Acquisition Software Package (Windows® based), which enables the research worker to store the data into individual files, ready to be easily managed by most statistical analysis packages available on the market. **Ask for details!**

Physical

Power Requirement	115 or 230 V, 50/60 Hz
Dimensions	50 (w) x 49 (d) x 63 (h) cm
Shipping dimensions	80 x 60 x 44 cm
Weight	Kg 10,50
Shipping Weight	Kg. 18.00 (approx.)

47800 COMBO-PACKAGE FOR MOUSE & RAT



If you plan to work with both rats and mice, you should consider the Combination Package Mouse Rota-Rod 47600 + Rat Rota-Rod 47700, offered at a special price.

47600 Mouse Rota-Rod

Ordering Information

47700	RAT ROTA-ROD , standard package, including:
47700-301	Dust Cover
47700-320	Trip Plate, complete (4 pieces)
47700-321	Transmission Belt
47700-302	Instruction Manual
E-WP008	Mains Cord
52050-07	Dedicated Software Package, with serial cable
52010-320	Serial to USB adaptor
	Set of fuses

Optional

57145	Thermal Mini-Printer
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Bibliography

Method Papers

- N.W. Dunham & T.S. Miya: "A Note on a Simple Apparatus for Detecting Neurological Deficit in Rats & Mice" *J. Am. Pharmaceut. Assoc., Scientific Edit., XLVI: No. 3, 1957*
- B.J. Jones & D.J. Roberts: "The Quantitative Measurement of Motor Inco-ordination in Naive Mice Using an Accelerating Rotarod" *J. Pharm. Pharmacol.: 20: 302-304, 1968*

Papers Dealing With Rota-Rod Technique

- A.J. Grottick et alia: "Studies to investigate the role of 5-HT 2C Receptors on Cocaine- and Food-Maintained Behavior": *J. Pharmacol. Exper. Therap., 2000*
- L.T. Huang et alia: "Pentylentetrazol-Induced Recurrent Seizures in Rat Pups: Time Course on Spatial Learning and Long...": *Epilepsia, 2002*
- E. Candelario-Jalil et alia: "Wide Therapeutic Time Window for Nimesulide Neuroprotection in a Model of Transient Focal Cerebral Ischemia in the Rat": *Brain Research: 177: 98-108, 2004*