



Passive Avoidance Step through

Cat. No. 7550

Step-Through Cage

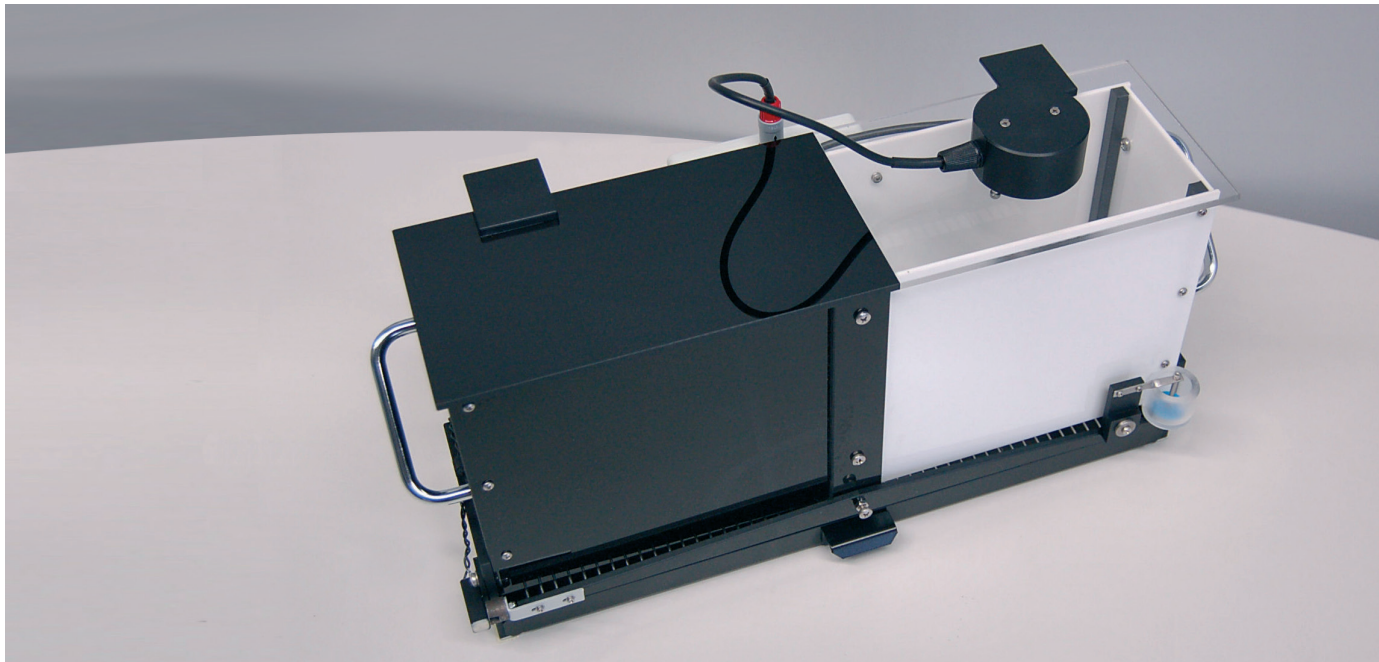
EFFICIENT, RELIABLE
INSTRUMENT FOR
THE CLASSIC PASSIVE
AVOIDANCE TEST

General

The instrument basically consists of a tilting-floor Passive Avoidance Cage divided into two compartments by a partition which embodies a sliding door. The tilting floor ensures a simple and reliable detection mechanism to score the animal's movement across the two compartments.

The Passive Avoidance controller incorporates the controls, latency time display and a constant-current high-precision 8-pole shocker, connected to the cage grid floor.

An intense light in the white compartment supplies the necessary aversive stimulus.



Main Features

- Silent and automated sliding door to divide the two compartments (no stepper motor!)
- Reliable tilting-floor detection mechanism
- Foot Pedal for hands-free operation

Passive-Avoidance Cage (step-down method)

Two types of cages are available:

- **7552** designed for **Rats**, dimensioned 52x30x35 (h) cm, inside dimensions 40x20x22 (h) cm.
- **7553**, designed for **Mice**, dimensioned 47x18x26 (h) cm (inside dimensions 39x9.5x16.5 (h) cm)

The cages are divided into two sections, the **START** and **ESCAPE** compartments. The START compartment is white and illuminated by a light fixture; the ESCAPE compartment is dark. The two compartments are divided by a partition which embodies an automatically operated sliding door at floor level.

Principle of Operation

The controls located on the Controller front panel enable the adjustment of the door delay and the shock current according to experience or data suggested by the literature.

With the rodent in the START compartment, the START pedal switch activates the timer DOOR DELAY, providing the opening of the door after a 0-99 s delay pre-settable by the operator in 1 s steps.

The opening of the door enables the timer which measures the animal latency, which is stopped at the animal crossing; the latency time is displayed in 0.1 steps. The door shuts one second after the crossing, to prevent the animal being upset or hurt by a too close door operation.

Data Acquisition

The 7550 Passive Avoidance Apparatus is provided with a connector for branching it to the **MULTIFUNCTION PRINTER Cat. 2600**, a microprocessor controlled device designed to acquire data from 6 (or 48, Cat. 2650) independent channels.

The data, stored in the 2600 internal memory and shown on its graphic display, can be printed out in real time and/or routed to the PC, via the 52050-01 DAS Software Package provided with the 2600 package.

The **52050** is a Windows® based Data Acquisition Software Package, 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.

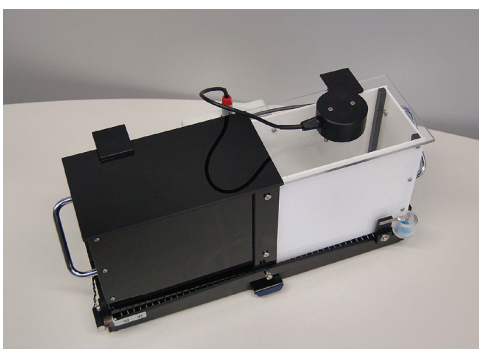


Fig. 1:
"7553
Mouse
Cage"

Ordering Information

7550 PASSIVE AVOIDANCE SET-UP FOR RATS (step-through), standard package, including:-
 7551 Passive Avoidance Controller
 7552 Passive Avoidance Rat Cage, incorporating an
 7555 Automatic Sliding Door (for rat cage)
 7537 Connection Cable
 7520 Spare Bulb
 7562 Dust Cover (for 7551)
 7513 Dust Cover (for 7552)
 7560 Instruction Manual
 E-WP 008 Mains Cord
 Set of fuses for either 230V or 1115V operation

7550-M PASSIVE AVOIDANCE SET-UP FOR MICE (step-through), standard package, including:-
 7551 Passive Avoidance Controller
 7552 Passive Avoidance Rat Cage, incorporating an
 7556 Automatic Sliding Door (for mouse cage)
 7514 Dust Cover (for 7553)
 other parts and accessories as for the Rat Set-up

Bibliografia

Papers which quote the P.A. Test (step-through)

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- M. Baraldi et alia: "**Cognitive Deficits and Changes in gene Expression of NMDA Receptors after Prenatal Methylmercury Exposure**" *Environmental Health Perspectives*, Vol. 110, 855-858, 2003
- Chandrashekhar S. Patil et alia: "**Protective Effect of Flavonoids against Aging- and Lipopolysaccharide -Induced Cognitive Impairment in Mice**" *J. Exper. Clin. Pharmacol.* Vol. 69, No. 2: 59-67, 2003
- R. Fornari et alia: "**Effects of the Selective M1 Muscarinic Receptor Antagonist Dicyclomine on Emotional Memory**" *Learning Memory* 7, No. 5: 287-292, 2000
- K. Wickman et alia: "**Brain Localization and Behavioral Impact of the G-Protein-Gated K+ Channel Subunit GIRK4**" *J. Neuroscience* 20 (15): 5608-5615, 2000.
- W. Danysz: "**Metaphit Fails to Antagonize PCP-Induced Passive Avoidance Deficit**" *Pharmacol. Biochem. & Behavior* 38: 231-233, 1991
- R. Zerbib & H. Laborit: "**Chronic Stress and Memory: Implication of the Central Cholinergic System**" *Pharmacol. Biochem. & Behavior* 36: 897-900, 1990
- J. Sweeny et alia: "**Effects of Different Doses of Galanthamine, a Long-acting Acetylcholinesterase Inhibitor, on Memory in Mice**" *Psychopharmacology* 102: 191-200, 1990