

#### MOTORY COORDINATION, GRIP STRENGTH, ACTIVITY

# **Multiple Activity Cage**

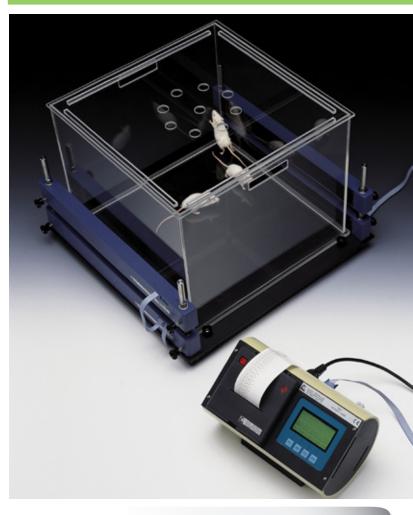
Cat. No. 47420

## General

The **47420 MULTIPLE ACTIVITY CAGE** package comprises:

- an **Electronic Unit**, Cat. 7441
- an I.R. Beam Cage, which consists of an Animal Cage of clear Perspex, Cat. 7433, complete with two sets of emitter/sen sor arrays for horizontal and vertical activity, respectively Cat. 7435 and Cat. 7436.

This set-up can accept up to 5 additional cages, for a total of 6.





### **MAIN FEATURES**

- Measures horizontal and vertical activity in rats and mice
- Psychopharmacology, in screening drugs which are potentially active on the central nervous system.
- Behavioural Sciences, in evaluating the variations of spontaneous activity after changes in environmental conditions

# **Electronic Unit**

The **7441** is designed to process the data originated by up to 6 **7433 cages**.

The Electronic Unit incorporates a graphic display, a thermal printer and a serial port RS232 for direct connection to the PC via the software Cat. 52050 included. A serial to USB connector is also included.

The graphic display presents all available commands. The operator sets the experiment configuration via the keyboard located below the display.

The activity data are displayed at preset intervals and printed/routed to the computer according to the selected configuration. The data can be customized by adding animal & experiment numbers, gender, etc.

**7441** is provided with an internal memory, capable to store the data of several experiments, to be unloaded to the PC later.

## Cage

The **7433** Cage consists of a cubicle, dimensioned  $41 \times 41 \times 33$  (h) cm, entirely made of clear Perspex. Upper lid and bottom catch pan detachable for cleaning.

The cubicle rests on a sturdy base made of black Perspex, provided with four vertical notched bars of stainless steel to which the horizontal/vertical detecting systems 7435 and/or 7436 can be fastened.

The **7435** consists of two facing blocks containing an I.R. array of emitters and, respectively, sensors. The **7435** records the **horizontal activity**. A similar system, Cat. **7436**, whose height can be adjusted, assesses the **vertical activity (rearing)**.

## **Data Acquisition**

The electronic unit 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 **52050-04** Data Acquisition Software Package (Windows<sup>®</sup> 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!



#### **Ordering Information**

**47420 MULTIPLE ACTIVITY CAGE**, standard package, including 7441 Electronic Unit (for up to 6 cages) and one 7433 with 7435 & 7436 emitter/sensor kit, cables & manual.

7441	Electronic Unit
7433	Animal Cage complete with I.R.
	Beam Array
7435	Set of emitter/sensor arrays for
	horizontal activity
7436	Set of emitter/sensor arrays for
	vertical activity
37400-305	Package of 10 Heat Sensitive
	Paper Rolls
7439	Instruction Manual
E-WP008	Mains Cord
52010-320	USB to serial port converter
52010-322	Serial cable 9 to 9 pin
Set of fuses	for either 230 or 115 V operation

#### **Physical (Dimensions & Weight)**

7441	27x16x19 cm, Kg 2.70
7433	54x50x37 cm, Kg 11.80
	(incl. 7435/7436)

#### Bibliography

• A. Marazioti et alia: **"Somatostatin Receptors in the Ventral Pallidum/Substantia Innominata Modulate Rat Locomotor Activity"** <u>Psychopharma-</u> <u>col.</u>, 181:2, 319-326, 2005

• W. Ponti et alia: "In vivo Model for the Evaluation of Molecules Active Towards Transmissible Spongiform Encephalopathies" <u>Veter. Res. Communicat.</u>, 28:1, 307-310, 2004

• T. Dolezal et alia: "Guaifenesin Enhances The Analgesic Potency of Paracetamol in Mice" Arch. Pharmacol., 366:6, 551-554, 2002

• M. Votava et alia: "Effects of Alprazolam and Fluoxetine on Morphine Sensitization in Mice" Physiol. Res., 51, 417-423, 2002

