Active Avoidance Set-Up
(Automatic Reflex Conditioner)

SPECIFIC CAGES FOR RATS AND FOR MICE

Cat. No. 40530

General

The new model of **Active Avoidance Set-Up** has been designed to enable the researcher to perform a wide range of avoidance experiments, each according to a flexible schedule.

Via the TIMELINE feature, the user will be able to configure a number of different tests, according to the specific experimental needs, namely the classical shuttle-box tests in its various modes.

Ugo Basile Active Avoidance set-up instrument basically consists of a Controller, and a Cage for either rat or mouse.

The tests are conducted in a cage, divided into two sections by a partition with an intercommunicating opening at floor level.

The tilting floor ensures a simple and reliable detection mechanism to score the animal's movement across the two compartments.

The electronic unit encompasses all controls for up to 4 cages, and a scrambling shocker.
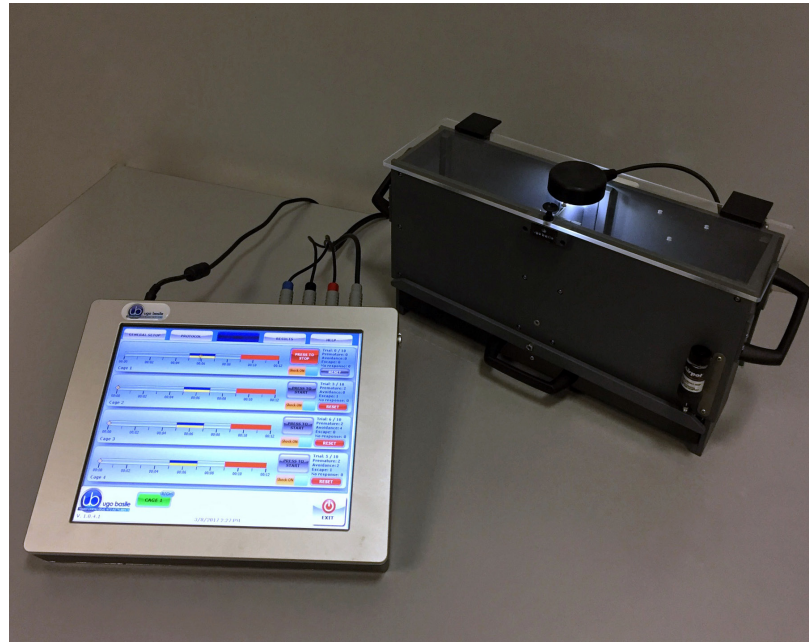
NEW VERSION

Multiple-Cage Set-up

EFFICIENT, RELIABLE INSTRUMENT FOR THE CLASSIC ACTIVE AVOIDANCE TEST

tip! this is part of the beehive cage-manager system; buy a single touch-screen controller, and manage all UB conditioning cages. Ask for details!

touch-screen controller

Main Features

- **Maximum flexibility**: configure your own Avoidance-Experiment Schedules via the **timeline** function

- The electronic unit encompasses all controls for **up to 4 animal cages!**

- Reliable tilting-floor detection mechanism

NEW on the 2014 version!

- The new "launcher" application, makes it possible to manage other UB behavioral cages with the same **Touch-Screen Controller 40500-001**; just purchase the hardware and the application software for the additional test!

- **Remote Control feature** will make remote service and software upgrades extremely simple!

Ugo Basile: more than 25,000 citations

Instrument Description

Different set-ups, depending on animal (rat or mouse) and number of cages, can be obtained by combining the following elements:

- **Programming/Recording Unit with Shocker**
- **Rat Cage** (up to 4 with one controller)
  or
- **Mouse Cage** (up to 4 with one controller)
- **Expansion Box**, for multiple cage set-up

Programming/Recording Unit

The **40500-001** Programming/Recording Unit, encompassing all controls, incorporates a constant-current high precision 8-pole shocker, and manages data acquisition: data are stored inside the unit and can be downloaded via the USB key provided as standard, for further processing via Excel, Access, etc.
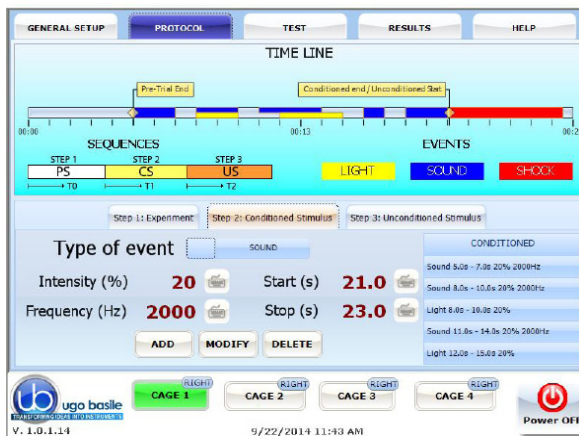
The Unit, incorporating a 12" touch-screen, manages the Active Avoidance Test via the **40530-010** Software. Up to 4 cages can be connected to the same Controller.

If more than one cage is connected, an expansion box **40500-005** is required for each additional cage.

The trials can be configured via the **TIMELINE** feature, entering the setting via the virtual keyboard: trial number, the acoustic/visual stimulus, delay, shock intensity, and timing of the different experimental sequences:

PS: pre-stimulus interval (randomizable)
CS: conditional stimulus interval
US: unconditional stimulus interval.

Active-Avoidance Cage (shuttle-box)

Two types of cages are available:

- **40532** designed for **Rats**
  dimensioned 57x27x30(h)cm, I.D. 48x20x22(h)cm
- **40533** designed for **Mice**
  dimensioned 47x18x25(h)cm, I.D. 38x9x17(h)cm

Both cages are provided with acoustic and visual conditioning stimulators. The reinforcement consists of an electrical stimulus applied to the floor bars of the cage by an incorporated 8-pole "scrambling" circuit.

The cage is divided into two compartments intercommunicating by an opening at floor level.

When the animal crosses the door, the cage floor tilts, thus operating a reed arrangement, which cuts out all the stimuli or, if the crossing takes place during the pause, records the intertrial crossing.

Ordering Information

40500-001	Programming/Recording Unit & Shocker
40530-010	**A.A. Software** and activation
40532	**Rat Cage**, complete with catch pan
40533	**Mouse Cage**, complete with catch pan
40500-005	**Expansion Box**, for multiple cage set-up

Specifications :

Shock Duration	in steps of 0.1s
Shock intensity	0-3mA step 0,1mA
Light intensity	0-100%, in steps of 5
Sound intensity	0-100%, in steps of 5
Sound frequency	100-18.000Hz, in steps of 100Hz
Light, sound, shock start	in seconds, 0,1s precision
Light, sound, shock stop	in seconds, 0,1s precision

Physical:

Weight	2.7Kg	(40500-001)
	5.3Kg	(40532)
	3.4Kg	(40533)
Shipping Weight	4Kg	(40500-001)
	9Kg	(40532)
	5.8Kg	(40533)

Bibliography

Papers which quote Ugo Basile A.A.Test (previous model)

- D. Dimitrova, D. Getova: "**Effects of Rivastigmine on Learning and Memory Processes in Rats Active Avoidance Test**" Medicine 4.1, **2014**
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- O. Ortiz et alia: "A**ssociative Learning and CA3–CA1 Synaptic Plasticity Are Impaired in D1R Null, Drd1a/ Mice and in Hippocampal siRNA Silenced Drd1a Mice**" J.Neuroscience 30 (37): 12288-12300, **2010**
- J.I. Lemos et alia: "**Involvement of the prelimbic prefrontacortex on cannabidiol-induced attenuation of contextual conditioned fear in rats**" Behav. Brain Res. 207: 05-111, **2010**
- N. Seferos et alia: "**Mandibular bone density and calcium content affected by different kind of stress in mice**" J Musculoskelet Neuronal Interact. 10 (3): 231-236, **2010**