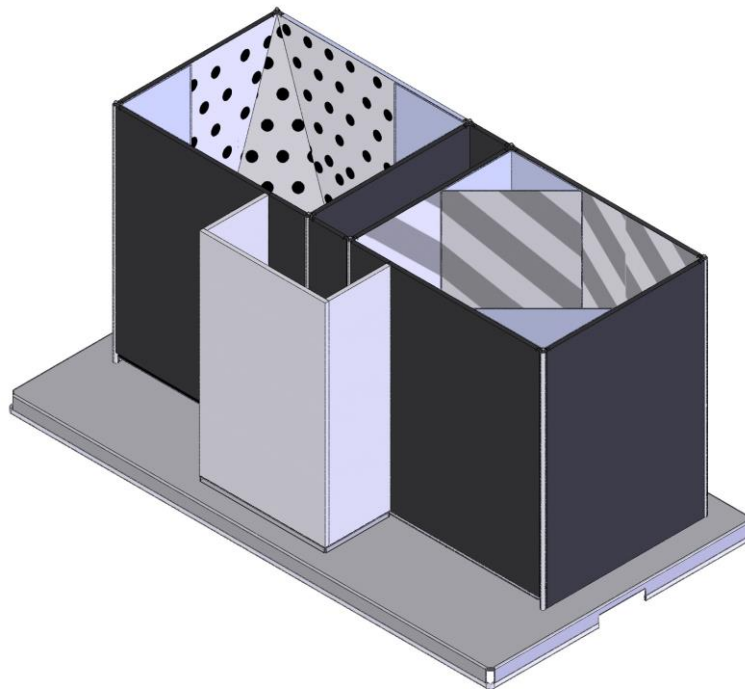


# Hardware User's Manual

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## Spatial place preference box



### References:

LE895 (76-0278 ), LE897 (76-0279)

### Publication:

PB-MF-MAN-062-REV1.0

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#### Limitation of Liability

PANLAB does not accept responsibility, under any circumstances, for any harm or damage caused directly or indirectly by the incorrect interpretation of what is expressed in the pages of this manual.

Some symbols may have more than one interpretation by professionals unaccustomed to their usage.




PANLAB reserves the right to modify, in part or in total, the contents of this document without notice.

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## 1. SYMBOLS TABLE

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Recognising the symbols used in the manual will help to understand their meaning:

DESCRIPTION	SYMBOL
Warning about operations that must not be done because they can damage the equipment	
Warning about operations that must be done, otherwise the user can be exposed to a hazard.	
Decontamination of equipments prior to disposal at the end of their operative life	

## 2. GOOD LABORATORY PRACTICE

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Check all units periodically and after periods of storage to ensure they are still fit for purpose. Investigate all failures which may indicate a need for service or repair.

Good laboratory practice recommends that the unit be periodically serviced to ensure the unit is suitable for purpose. You must follow preventive maintenance instructions. In case equipment has to be serviced you can arrange this through your distributor. Prior to Inspection, Servicing, Repair or Return of Laboratory Equipment the unit must be cleaned and decontaminated.



### Decontamination prior to equipment disposal

In use this product may have been in contact with bio hazardous materials and might therefore carry infectious material. Before disposal the unit and accessories should all be thoroughly decontaminated according to your local environmental safety laws.

### 3. UNPACKING AND EQUIPMENT INSTALLATION

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**WARNING:** Failure to follow the instructions in this section may cause equipment faults or injury to the user.

- A. Due to the weight of the cage and its dimensions it should be moved between two persons in order to avoid possible damage when moving it.
- B. Inspect the instrument for any signs of damage caused during transit. If any damage is discovered, do not use the instrument and report the problem to your supplier.
- C. Ensure all transport locks are removed before use. The original packing has been especially designed to protect the instrument during transportation. It is therefore recommended to keep the original carton with its foam parts and accessories box for re-use in case of future shipments. Warranty claims are void if improper packing results in damage during transport.
- D. Place the equipment on a flat surface and leave at least 10 cm of free space between the rear panel of the device and the wall. Never place the equipment in zones with vibration or direct sunlight.

The manufacturer accepts no responsibility for improper use of the equipment or the consequences of use other than that for which it has been designed.

#### PC Control

Some of these instruments are designed to be controlled from a PC. To preserve the integrity of the equipment it is essential that the attached PC itself conforms to basic safety and EMC standards and is set up in accordance with the manufacturers' instructions. If in doubt consult the information that came with your PC. In common with all computer operation the following safety precautions are advised.



- WARNING**
- To reduce the chance of eye strain, set up the PC display with the correct viewing position, free from glare and with appropriate brightness and contrast settings
  - To reduce the chance of physical strain, set up the PC display, keyboard and mouse with correct ergonomic positioning, according to your local safety guidelines.

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## 5. INTRODUCTION

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The Spatial Place Preference<sup>1</sup> Cage has been designed to optimize place preference studies. This cage allows:

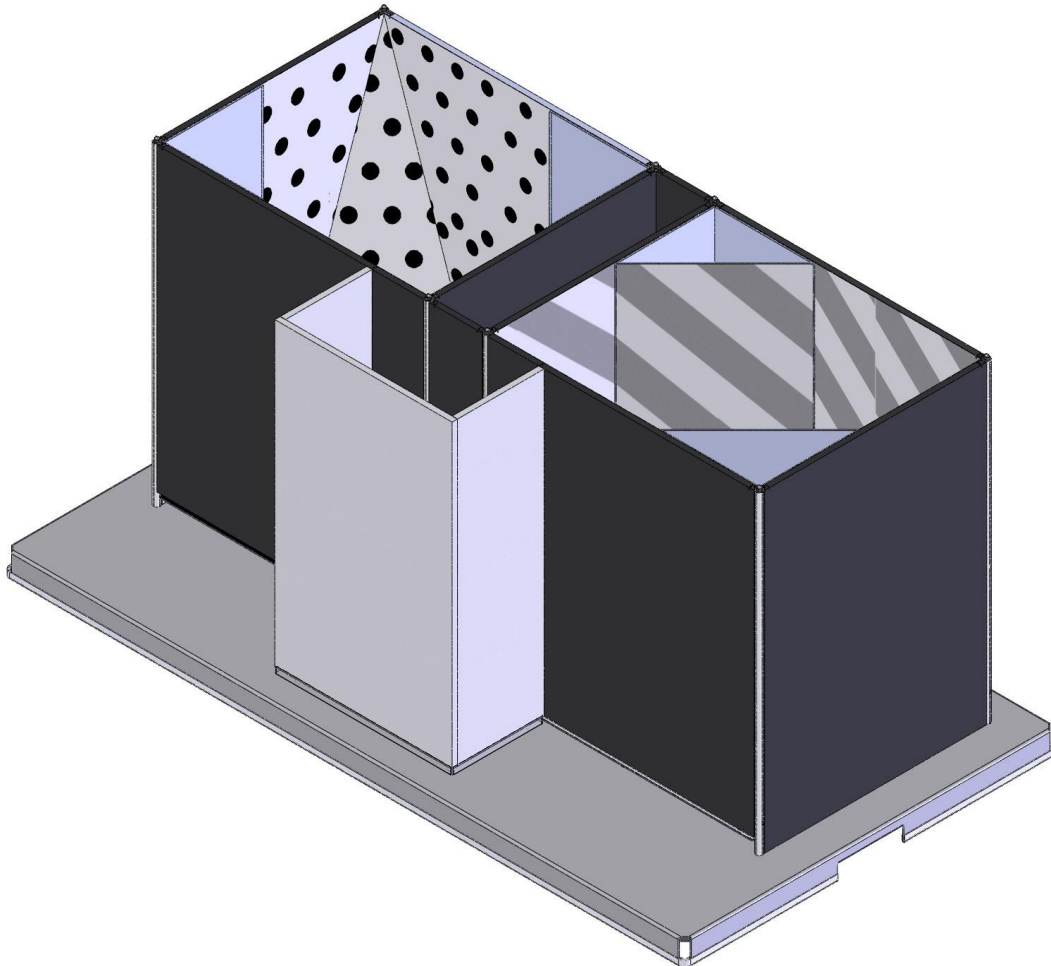


Figure 1. Spatial Place Preference.

- Multiple combinations.
- Optimal differentiation among compartments.
- Minimization of spatial preference during time previous to trial.
- Corridor with transparent walls to minimize the time that the animal stays in this compartment.
- Detection of animal position by video and **Smart** software.

The spatial configuration of the compartments can be easily modified by using three-dimensional elements that can be placed in the corners, and the floor can be modified to have a smooth or rough surface using panels.

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<sup>1</sup> This kind of experiment was developed by professors Rafael Maldonado and Olga Valverde from the Neuropharmacology laboratory at Pompeu Fabra University, Barcelona (Spain).

## 6. EQUIPMENT DESCRIPTION

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### 6.1. EXPERIMENTATION BOX

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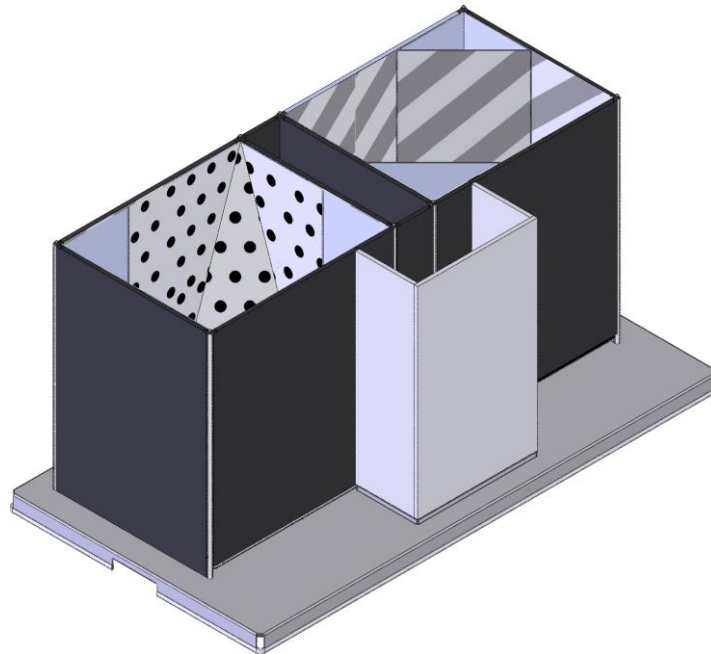


Figure 2. Spatial Place Preference Cage.

The experimentation cage has three well-defined areas. On the left side there is a compartment that has white walls with black dots and a black floor. In the central part there is a corridor with transparent walls and floor. It lets the animal pass between compartments. On the right, there is a compartment that has white walls with diagonal grey stripes and a grey floor.

The floors in the left and right zones can be smooth or rough. Simply turn the platform surface to change from one to another.

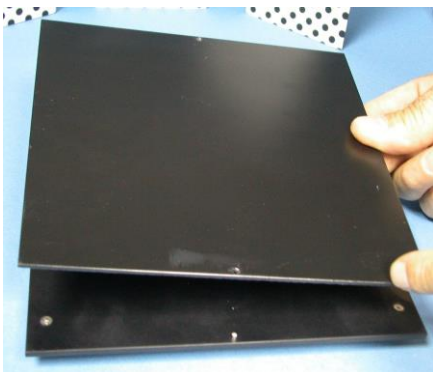


Figure 3. Smooth floor.

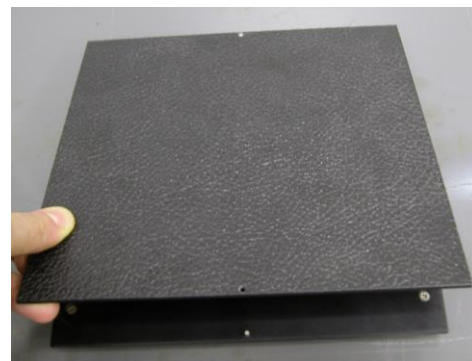


Figure 4. Rough floor.

The spatial configuration in the left and right zones can be modified by means of accessories that can be placed in the corners of the walls. The accessories are painted in the same way as the walls and have the following shapes.

- 2 triangular-based prisms.
- 1 oblique triangular-based pyramid.

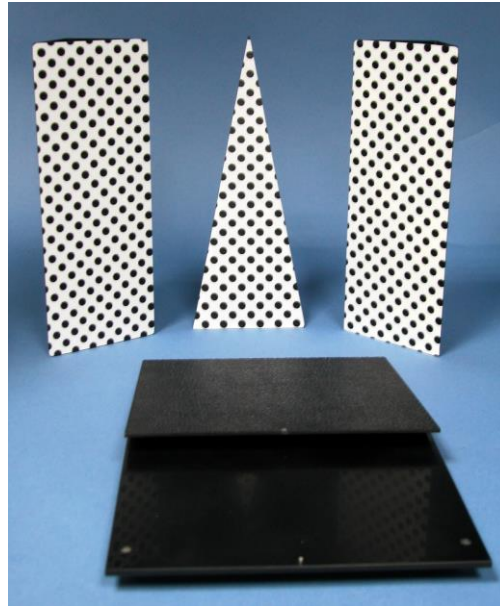


Figure 5. Left zone accessories used to modify its spatial configuration.



Figure 6. Right zone accessories used to modify its spatial configuration.

These accessories are affixed to the corners by means of magnets and notches that fit into a support at the bottom of the cage.



## 7. ASSEMBLING THE CAGE

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### 7.1. PLACING FLOORS IN THE PLATFORM

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The floors of different compartments must be positioned so that their legs rest on the 4 holes that are in the platform.

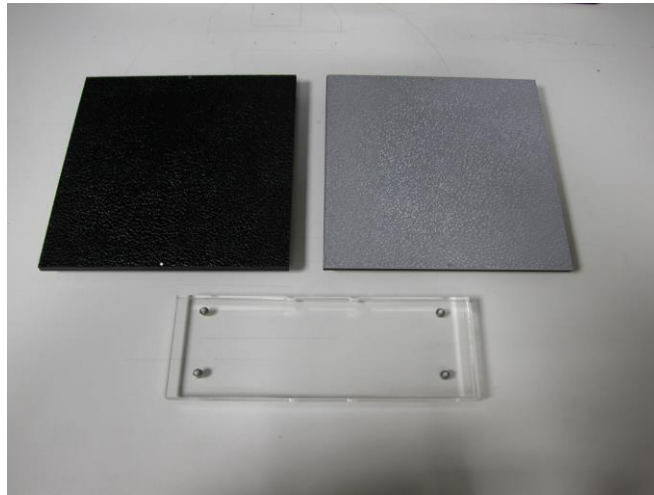


Figure 7. Floors of the different compartments.

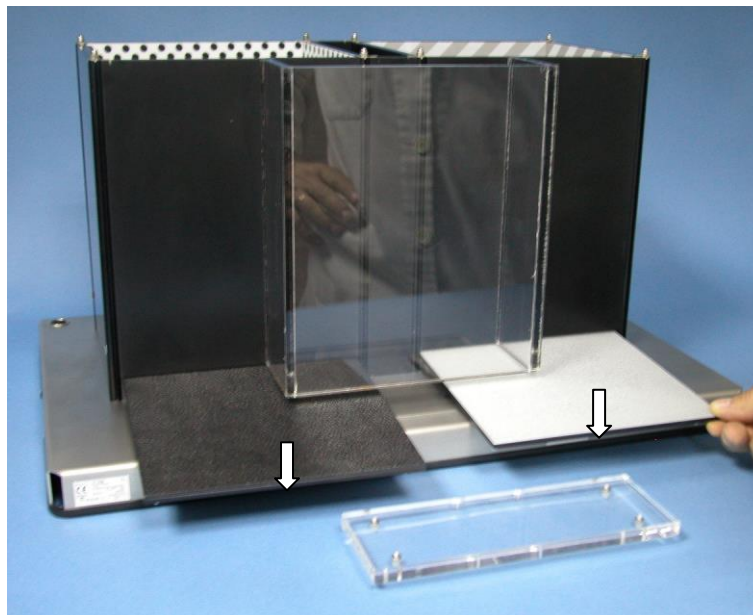


Figure 8. Placement of floors in the cage.

In the above figure, the arrows point to dots on the floors to indicate the position in which they should be inserted (always with dots on the front and back, never on the sides).

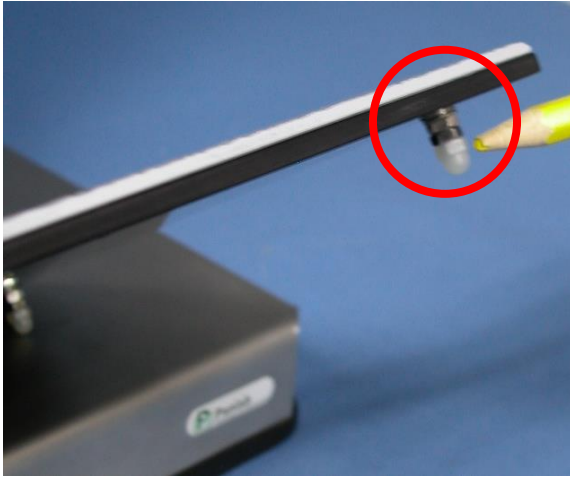


Figure 9. Floor leg.

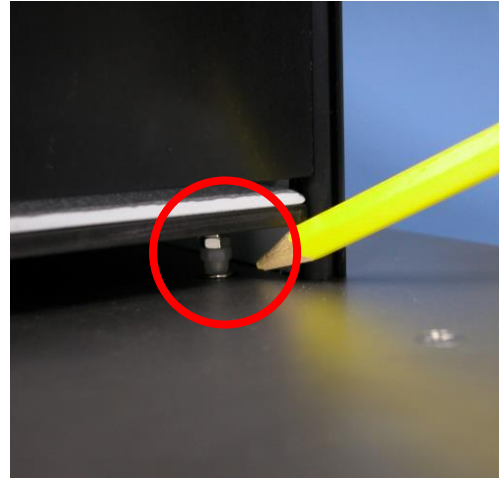


Figure 10. Floor final position.

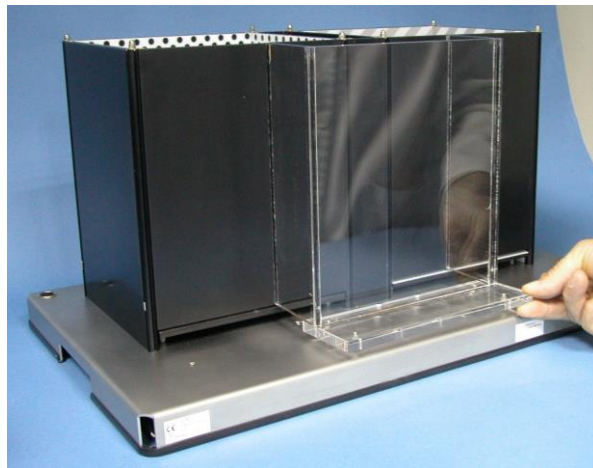


Figure 11. Transparent corridor floor placement.

## 7.2. CAGE SPATIAL CONFIGURATION

Accessories are available to modify the shape of the left and right compartments. These are affixed to metal bars in the corners by magnets. The notches rest on pivots on the cage walls for this purpose.

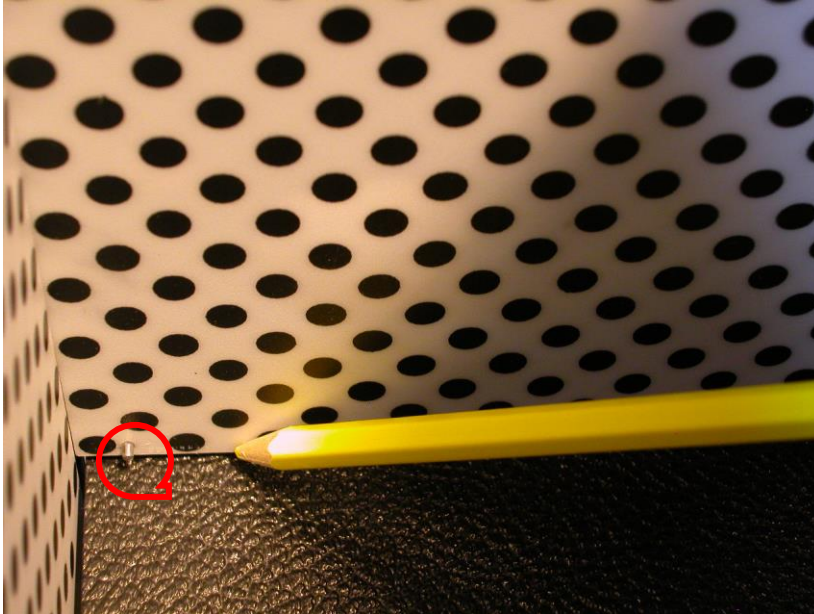


Figure 12. . Pivot that matches with notch accessory.



Figure 13. Notch.

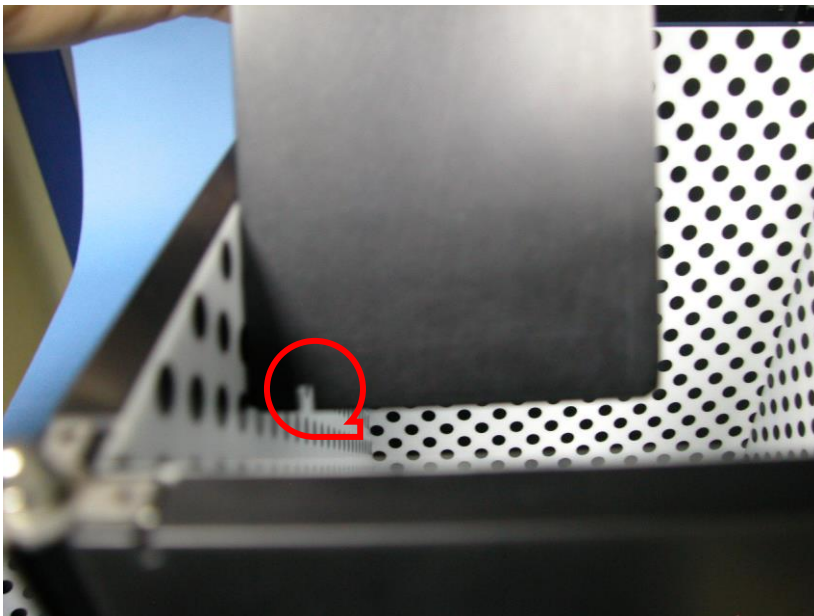


Figure 14. Notch.

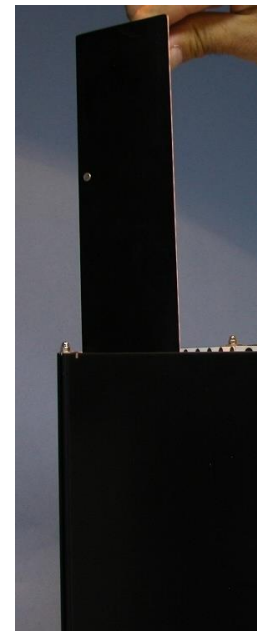


Figure 15. Accessory placement.

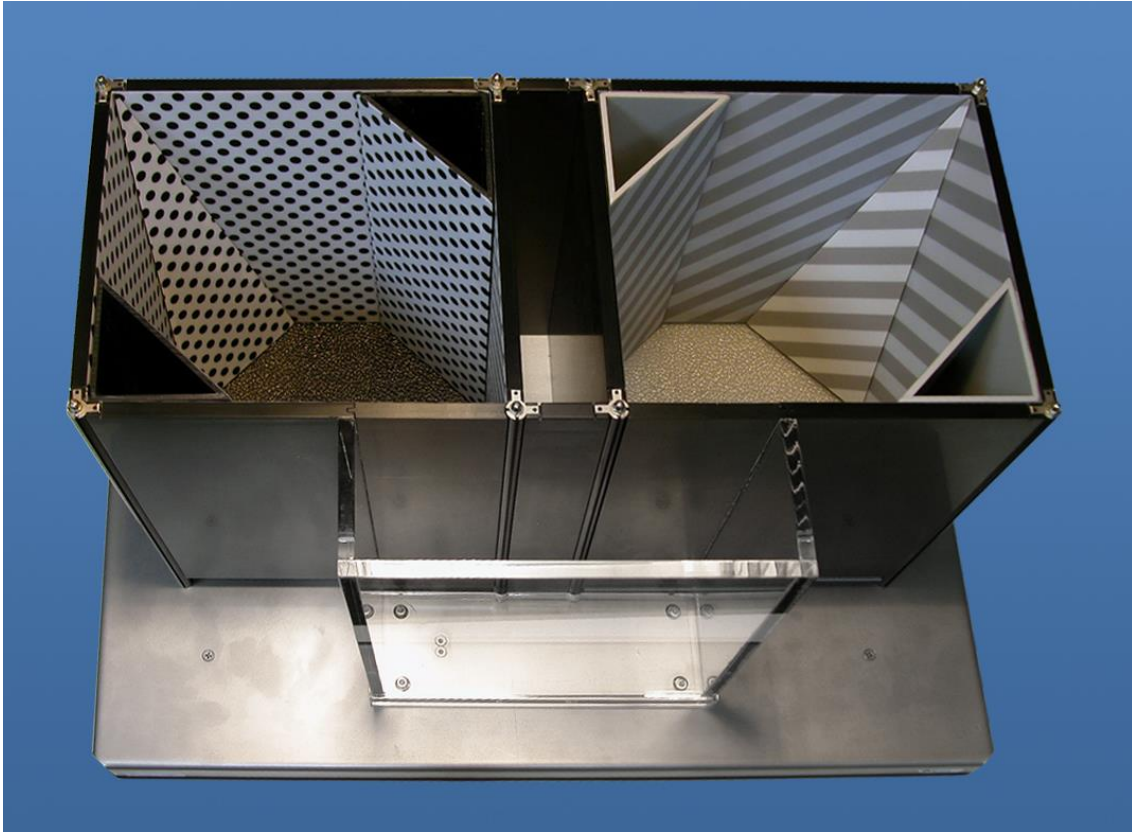


Figure 16. Example of spatial configuration.

## 8. WORKING WITH THE EQUIPMENT

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### 8.1. CONDUCTING AN EXPERIMENT

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Read carefully the instructions given of the **Smart** program for conducting an experiment. Once the experiment has ended you should clean the equipment so that it is in good condition for the next experiment.

### 8.2. CLEANING THE FLOORS

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To clean the floors you can use a slightly wet cloth and then dry them with a dry cloth. If they're too dirty you can wet the cloth with a soapy solution to clean them, then remove foam with a wet cloth and finally dry them with a dry cloth.

### 8.3. CLEANING THE DOORS

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To clean the doors you can use a slightly wet cloth and then dry them with a dry cloth. If they're too dirty you can wet the cloth with a soapy solution to clean them, then remove foam with a wet cloth and finally dry them with a dry cloth.

### 8.4. CLEANING THE TRANSPARENT PARTS

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**WARNING:** To clean transparent parts never use alcohol or alcohol derived products, otherwise stripes will appear in the transparent plastic.

To clean transparent parts you can use a slightly wet cloth and then dry them with a dry cloth. If they're too dirty you can wet the cloth with a soapy solution to clean them, then remove foam with a wet cloth and finally dry them with a dry cloth.

## **8.5. WALLS CLEANING**

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To clean the walls you can use a slightly wet cloth and then dry them with a dry cloth. If they're too dirty you can wet the cloth with a soapy solution to clean them, then remove foam with a wet cloth and finally dry them with a dry cloth.

## **8.6. CLEANING PRISMS & PYRAMIDS**

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To prisms and pyramids you can use a slightly wet cloth and then dry them with a dry cloth. If they're too dirty you can wet the cloth with a soapy solution to clean them, then remove foam with a wet cloth and finally dry them with a dry cloth.

## 9. PREVENTIVE MAINTENANCE

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	EXPERIMENT
CLEANING THE FLOORS	<input checked="" type="checkbox"/>
CLEANING THE DOORS	<input checked="" type="checkbox"/>
CLEANING THE TRANSPARENT PARTS	<input checked="" type="checkbox"/>
CLEANING THE PRISMS	<input checked="" type="checkbox"/>
CLEANING THE PYRAMIDS	<input checked="" type="checkbox"/>
CLEANING THE WALLS	<input checked="" type="checkbox"/>

## 10. SPECIFICATIONS

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DIMENSIONS (EXPERIMENTATION CAGE)<sup>2</sup>

MODEL	ANIMAL	SIZE (Length*Width*Height)	WEIGHT (Kg)
LE895	Mouse	582*362*321	13,5
LE897	Rat	1022*560*512	37,5

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<sup>2</sup> Dimensions are expressed in millimeters.



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DECLARATION OF CONFORMITY  
DECLARATION DE CONFORMITÉ**

Nombre del fabricante: **Panlab s.l.u.**  
 Manufacturer's name: [www.panlab.com](http://www.panlab.com)  
 Nom du fabricant: [info@panlab.com](mailto:info@panlab.com)

Dirección del fabricante: **Energía, 112**  
 Manufacturer's address: **08940 Cornellà de Llobregat**  
 Adresse du fabricant: **Barcelona SPAIN**

Declara bajo su responsabilidad que el producto: **SPATIAL PLACE PREFERENCE**  
 Declares under his responsibility that the product:  
 Déclare sous sa responsabilité que le produit:

Marca / Brand / Marque: **PANLAB**

Modelo / Model / Modèle: **LE 895 – LE 897**

Cumple los requisitos esenciales establecidos por la Unión Europea en las directivas siguientes:  
 Fulfils the essential requirements established by The European Union in the following directives:  
 Remplit les exigences essentielles établies pour l'Union Européenne selon les directives suivantes:

**2011/65/EU** Restricción de ciertas Sustancias Peligrosas en aparatos eléctricos y electrónicos (ROHS) / Restriction of the use of certain Hazardous Substances in electrical and electronic equipment (ROHS) / Restriction de l'utilisation de certaines substances dangereuses dans les équipements électriques et électroniques (ROHS)

Analisis de riesgos / Risk assessment / Analyse des risques

Para su evaluación se han aplicado las normas armonizadas siguientes:  
 For its evaluation, the following harmonized standards were applied:  
 Pour son évaluation, nous avons appliqué les normes harmonisées suivantes:

En consecuencia, este producto puede incorporar el marcado CE:  
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 En conséquence, ce produit peut incorporer le marquage CE:



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 Manufacturer's representative:  
 En représentation du fabricant:

  
 Carme Canals  
 General Manager  
 Panlab s.l.u., a division of Harvard BioScience

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