

## Conditioned Place Preference Box (CPP)

Cat. No. 42552 for Rat

Cat. No. 42553 for Mouse

### General

The **Ugo Basile Conditioned Place Preference (CPP)** is a 2-compartment box to evaluate the abuse potential of substances and the motivational effects of drugs.

The 2 compartments differ for the wall color and patterns and for the floor patterns and texture.

Both floors and contexts floors are interchangeable so that the visual and tactile difference between the 2 compartments can be easily adjusted by the scientist.

In fact, the CPP box includes the contextual cues required by the experimental paradigm; each box includes:

- 4 interchangeable floors with square and circular patterns
- 3 sets of walls.

The new CPP box has been designed and optimized for visual scoring, or for use with any video-tracking software. See [www.ub.anymaze.com](http://www.ub.anymaze.com).



IDEAL TO STUDY

**Drug Abuse**

**Addiction**

- **Interchangeable floors for tactile stimulation**

- **NEW MODEL with interchangeable CONTEXTS**

### Main Features

- Optimized for Video-Tracking
- Specific models for rats or mice
- Designed for multiple-cage systems
- Interchangeable floors provided for different patterns & texture
- Walls in either compartment can be visually altered, by replacing the context kit

## Rat and Mouse Box

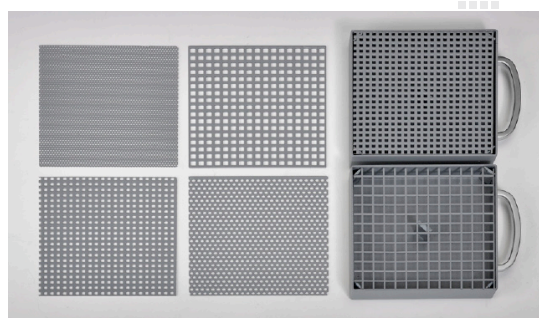
The box **42552** is designed for tests on rats. Its dimensions are 63x32x35(h)cm (handles excl.), and each of the two spaces has an inside dimension of 30x30x30(h)cm. The box **42553** is similar, but its dimensions (35x18x29(h) cm, ID 16x15x25(h)cm) make it suitable for use with mice.

Both boxes have a patterned door in the central wall, 7.5x7.5cm in the rat, 4x6(h)cm in the mouse box.

## Tactile Stimulation: Patterned Floors

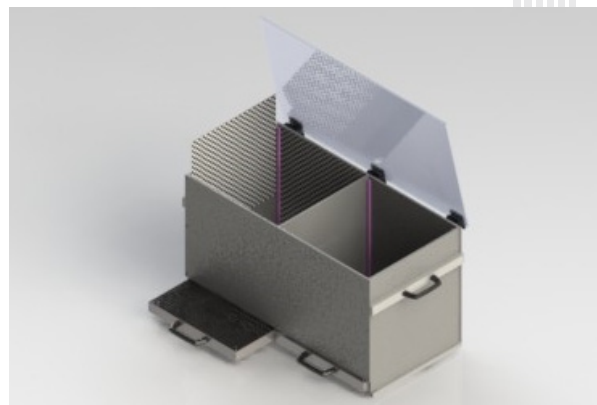
One of the major keys to the success of a **CPP** experiment is due to the design of the visual and tactile differences between the 2 compartments.

Ideally the 2 compartments should have clearly distinct contextual cues but should not determine any preference in unconditioned animals.



Given the importance of **paw tactile sensitivity** in rodents, while the design of commercially available CPP boxes has traditionally focused only on the wall patterns and colors, the Ugo Basile CPP box includes 4 interchangeable floors with different patterns & texture.

4 sets of floor grids, and 2 sets of replaceable wall contexts (striped and checked) are supplied with each box:



Walls with **different texture** can be provided on request: please ask for information!

## Rationale and outline of the procedure

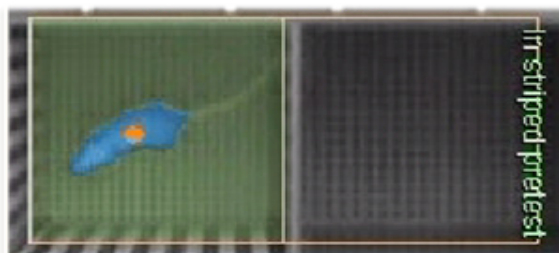
The CPP paradigm provides information on the rewarding or aversive effects of visible and tactile contextual cues associated with drugs.

This technique has acquired great popularity in research studies involving addiction, being much easier, if compared to drug self-administration procedures.

First, the animal is conditioned to identify one of the two compartments with the drug experience. Then the time spent in each compartments is measured; preference or aversion to the drug-paired compartment, hence rewarding/aversive properties of drugs, can be easily deduced.

The CPP test only requires the animal to carry out a simple operation (i.e. move from one compartment to the other) to approach or avoid the drug-paired compartment; the animal is expected to spend more time in the drug-paired compartment, if the drug experience produced a positive effect.

## Optimized For Video-Tracking



All floors are grey-colored, to optimize contrast and facilitate tracking of both dark and albino animals.

## Ordering Information

<b>42502</b>	<b>CPP BOX for RAT</b> , including
<b>M-TR 230-F</b>	Floor Drawer (2 pcs.)
<b>42502-011</b>	Round 2mm holes, 6mm interax. (2 pcs.)
<b>42502-012</b>	Round 12mm holes, 16mm interax. (2 pcs.)
<b>42502-014</b>	Square 6x6mm holes, 9mm interax. (2 pcs.)
<b>42502-013</b>	Square 10x10mm holes, 12mm interax. (2 pcs.)
<b>42552-320</b>	<b>Wall Context Kit for Rat Cage</b>
Weight	22Kg net, 25Kg gross; Packing: 80x60x44cm
<b>42503</b>	<b>CPP BOX for Mouse</b> , including:
<b>M-TR 238-F</b>	Floor Drawer (2)
<b>42503-012</b>	Round 2mm holes, 3mm interax., 2 pcs.
<b>42503-011</b>	Round 4mm holes, 6mm interax., 2 pcs.
<b>42503-013</b>	Square 4x4 holes, 7mm interax., 2 pcs.
<b>42503-014</b>	Square 6x6 holes, 9mm interax., 2 pcs.
<b>42553-320</b>	<b>Wall Context Kit for Mouse Cage</b>
Weight	8Kg net, 10Kg gross; Packing: 36x55x45cm

## Acknowledgements & Bibliography

A special thank to Prof. Paola Fadda (Department of Pharmacology, University of Cagliari, Italy) for the initial design of the boxes: her valuable comments and suggestions allowed us to keep the focus on the user needs and opinions.

- L. Fattore et alia: "Baclofen Prevents Drug-Induced Reinstatement of Extinguished Nicotine-Seeking Behaviour and Nicotine Place Preference in Rodents" *Eur. European Neuropsychopharmacol.* 19(7): 487-498, 2009
- M. Scherma et alia: "Inhibition of Anandamide Hydrolysis by Cyclohexyl Carbamic Acid 3'-Carbamoyl-3-yl Ester (URB597) Reverses Abuse-Related Behavioral and Neurochemical Effects of Nicotine in Rats" *J. Pharmacol. and Exper. Therap.* 327:482-490, 2008