

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.



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

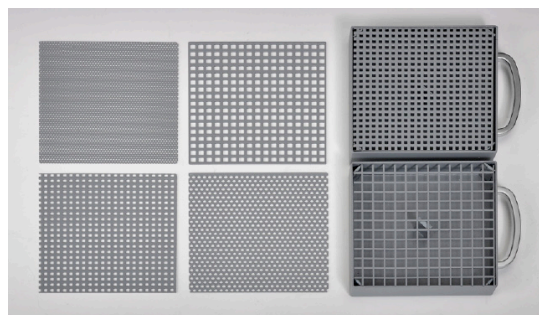
The box **42552** is designed for tests on rats. Its external dimensions are **60x30x30(h)cm**; the box **42553** is similar to the 42502, but its dimensions (**32x15x25(h)cm**) make it suitable for use with mice.

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

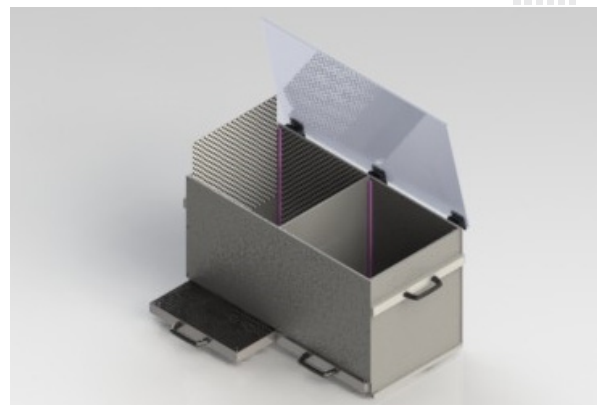
One of the major keys to the success of a **CPP** experiment is due to the design of the visual and tactile differences between the 2 compartments.

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.

Four sets of floor grids, and 3 sets of replaceable wall contexts (striped, checked, and dotted) are supplied with each box:



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

Rationale and outline of the procedure

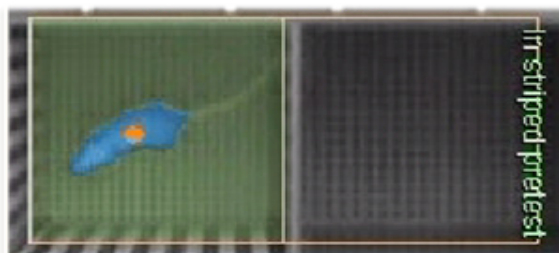
The CPP paradigm provides information on the rewarding or aversive effects of visible and tactile contextual cues associated with drugs.

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

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

Acknowledgements & Bibliography

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- 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