

Peira WaterMaze

PROBLEM

The Morris Water Maze task is a behavioral task, that is, the dependent measure of the behavior of the animal. Behavioral tests measure the responses of whole animals, allowing experimental manipulations to affect in vivo systems operating in harmony to provide a clear understanding of the outcome. Because there are so many factors involved between experimental manipulations and behavior, the effects can sometimes be unpredictable, and it can be difficult to ascertain whether the behavior was indeed a main effect of the experiment.

Existing experimental set ups did not allow for conducting the experiment in complete darkness resulting in uncontrolled external stimuli. Existing mazes were also equipped with fixed platforms which resulted in less representative results.



SOLUTION

Peira designs and builds its WaterMazes with programmable and retractable platforms and foresees the pool walls and bottom with infra-red LEDs, allowing imaging of the behavior of the animal in complete darkness with an infra-red camera. Screens with switchable cues above the water surface allow for testing the spatial learning capability of the animal or its implicit memory.

TECHNICAL DATA

Dimensions (LxWxH): 1750 x 1750 x 1180 mm

Weight: 170 kg Power: 300 W

Volts: 220 V 50/60 Hz Volume: 730 Litre (Max)

CE: The WaterMaze fully complies with all CE and EMC equipment guidelines

relative to mechanical and electrical safety and electromagnetic

compatibility.

Number of Platforms: 4, retractable

Illumination: Bottom and wall, IR Led

Air supply: 4 bar