

## *Eight Arms Radial Maze*

*The assessment of animal memory using different types of mazes has been longely used in neurosciences. Several models have been proposed recently, mainly trying to evaluate accuracy of choice between the alternatives presented in the same day of the session, instead of looking for the accumulated learning through successive days of training.*

*The "Eight Arms Radial Maze", proposed by D.S. Olton & R.J. Samuelson (J.Exper. Psychol: Anim. Behav. Procs. 2:97, 1976) is one of the most extensively used in behavioural laboratories all over the world, mainly due to the flexibility of its structure, allowing the testing of spatial memory but also non-spatial cue memory linked with motivational elements.*

*The LE 760 & LE 766 Radial Mazes from Letica are made of black Plexiglas (6 mm thick, all inner surfaces matt finished), mounted on a 100 cm high tripod (see picture above).*

*The arms (700 x 100 mm) are easily detachable by unscrewing an underneath fixing knob. In the proximal extreme, a sliding door (100 x 100 mm) is installed under a closing 200 x 100 mm wall (thus making the full extreme 300 mm high).*

*Each arm has lateral walls lowering from 300 mm high in the proximal extreme down to 30 mm in the distal one. A 30-mm high distal wall closes the arm.*

*In the distal extreme of each arm, a detachable recessed cup (35-mm diameter, 25-mm depth) can be installed (or replaced by an already supplied cover).*



The guillotine doors are manually operated in the LE 760 Radial Maze and electrically operated in the LE 766. This later also include automated entrance detection to each arm (by IR beams).

The LE 766 needs to be controlled by the "Maze8" software (see figure at right)

The software allows for the full control of the arm's doors either manually (by means of a buttons panel at the computer screen) or automatically, when a trained subject is being tested.

The position of the experimental subject is permanently verified and presented in the computer screen (see black dot in the figure).

Data are stored as ASCII coded files including the "History" of the subject's behaviour along the trial (order and duration of the visits to each arm).

### Ordering information

- LE 760      Eight arms radial maze for Rats
- LE 766      Automated eight arms radial maze for Rats, including software
- LE 762      Eight arms radial maze for Mice
- LE 768      Automated eight arms radial maze for Mice, including software

