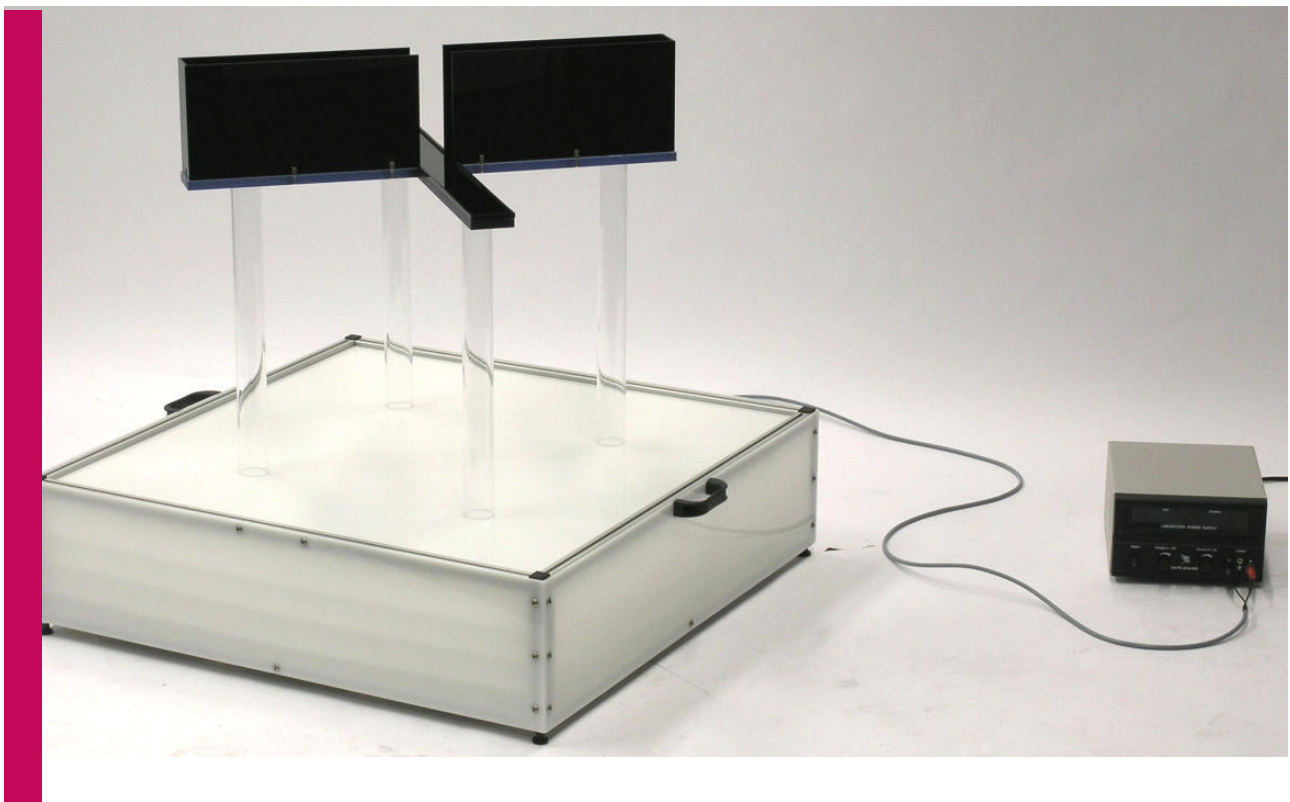


Product Overview

Sophisticated Life Science Research Instrumentation



TSE IR Box for VideoMot2

- Specifications subject to change without notice -

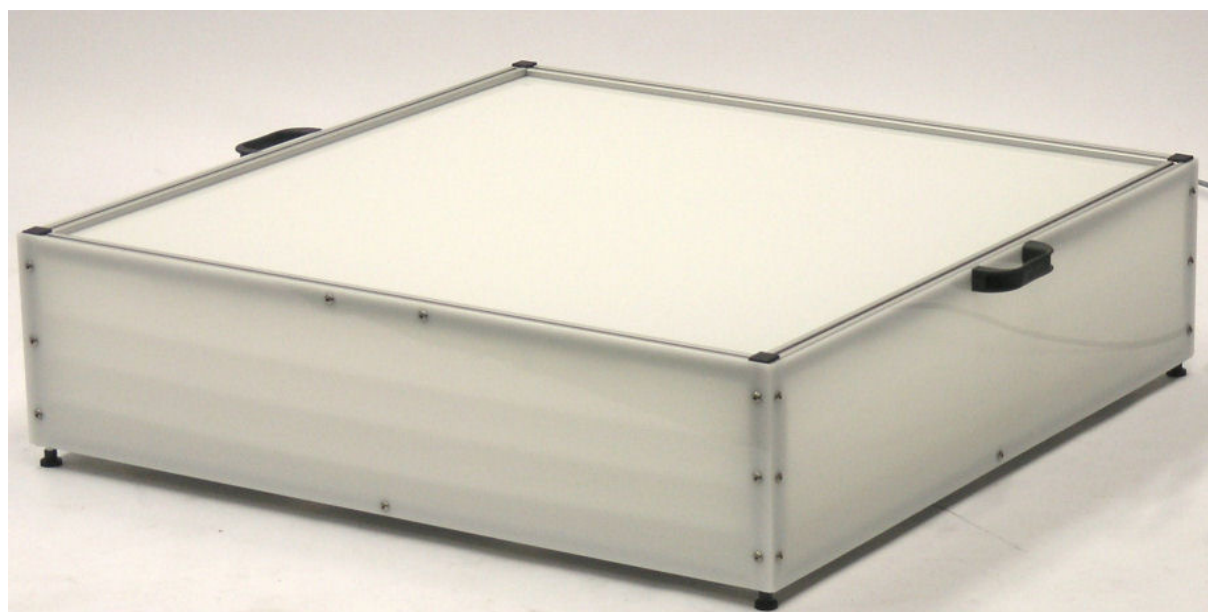
TSE IR Box for VideoMot2

The TSE IR Box is used in conjunction with test cages made from IR translucent material. It requires an IR-sensitive camera such as the TSE Black & White CCD camera that is part of the Black/White-Kits 302050-SW-KIT-X and the Lens/Filter Package 302050-Lens/Filter-Package-IR that includes an IR passfilter.

The box is equipped with an array of special LEDs that emit infrared light in the range between 880-940nm. The infrared light is invisible for the animal.

Due to the high sensitivity of the TSE camera in this wavelength range animals can be tracked independent of their color under daylight conditions, low light, red light or even in absolute darkness. It is not required to change the measurement parameters in the VideoMot2 software – this allows for a quick and easy change of light conditions without the need to “recalibrate” the system.

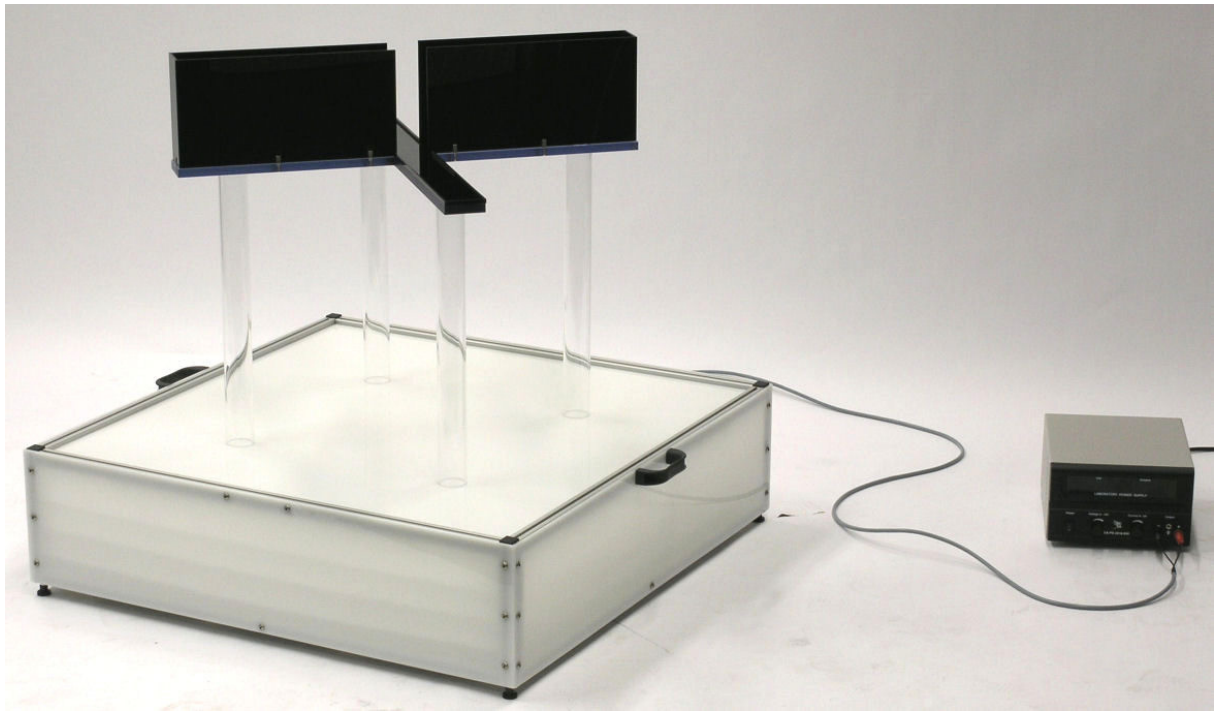
Animals of any color can be used including bicolored animals such as Lister-Hooded rats. For social contact experiments animals with different fur colors can be tested in the same cage – what is not possible if tracking under normal light conditions is performed. Urine spots will not disturb the measurement.



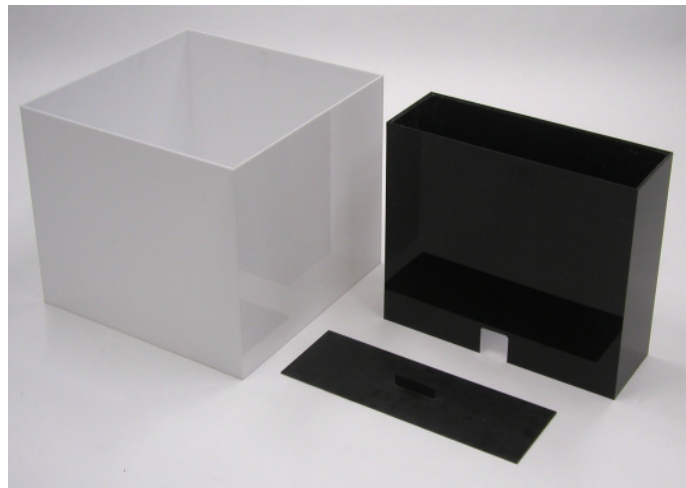
Small IR Box

The TSE IR Box is available in 2 different sizes:

- The **small** box has a size of 80x80x22cm and is suited for a 50x50cm IR Open Field or an IR Elevated Plus Maze for mice.
- The **large** box has a size of 150x150x22cm and is suited for a 100x100cm IR Open Field or an IR Elevated Plus Maze for rats.



Shown with an IR Elevated Plus Maze for mice



TSE Open Fields

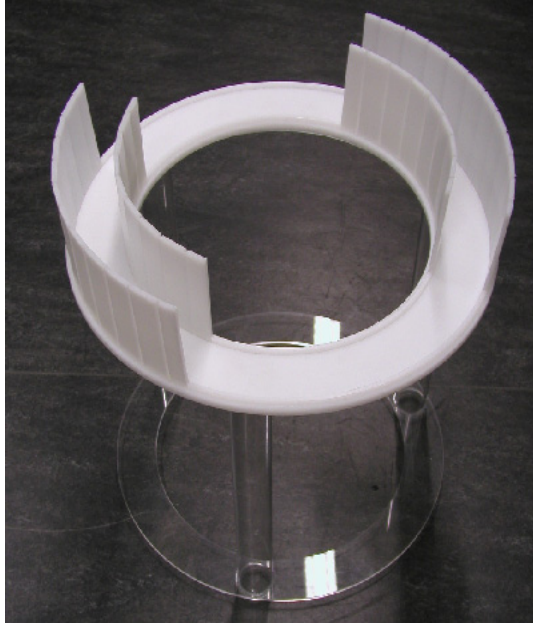
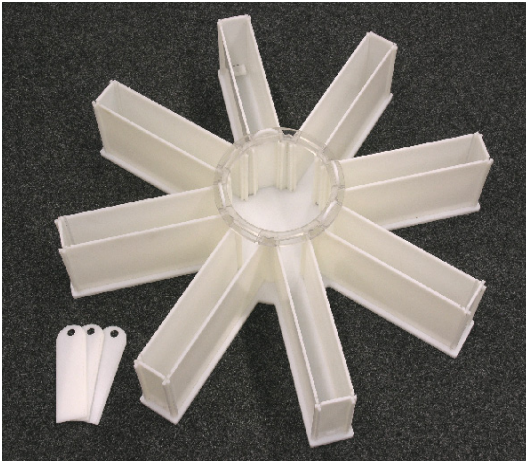
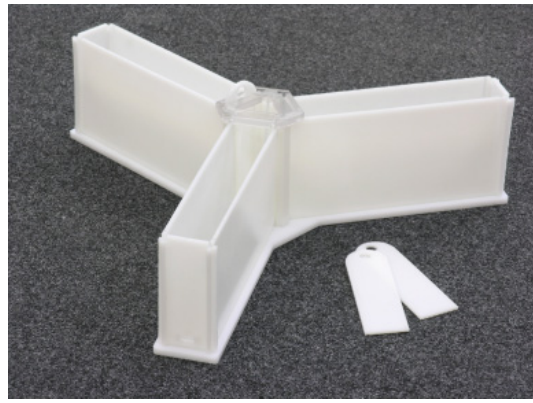
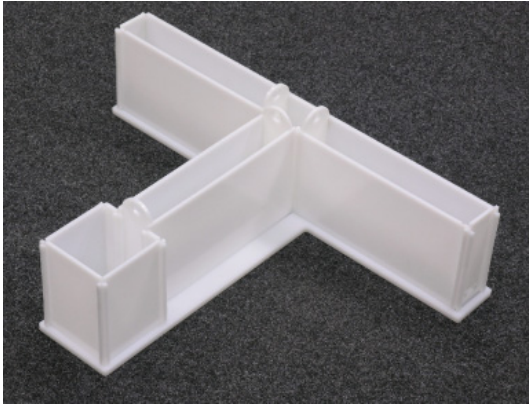
Left: Black acrylic *Right:* White PE with optional dark insert for Light/Dark tests

The IR permeable test cage can be made from black acrylic or white polyethylene.

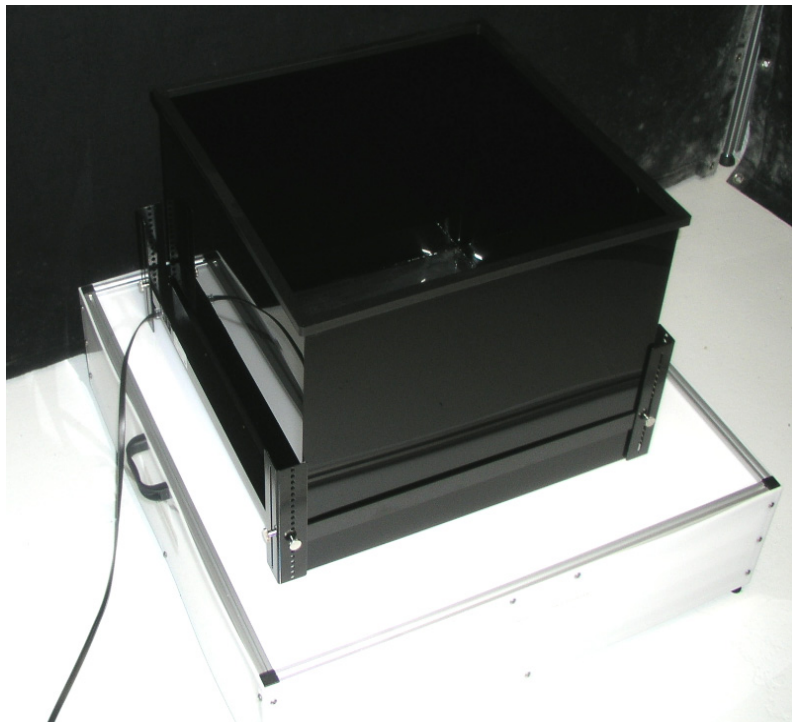
The white Open Fields can also be used together with a dark insert to perform Light-Dark-Tests.

The dark open field can be combined with a rearing frame for advanced Open Field studies.

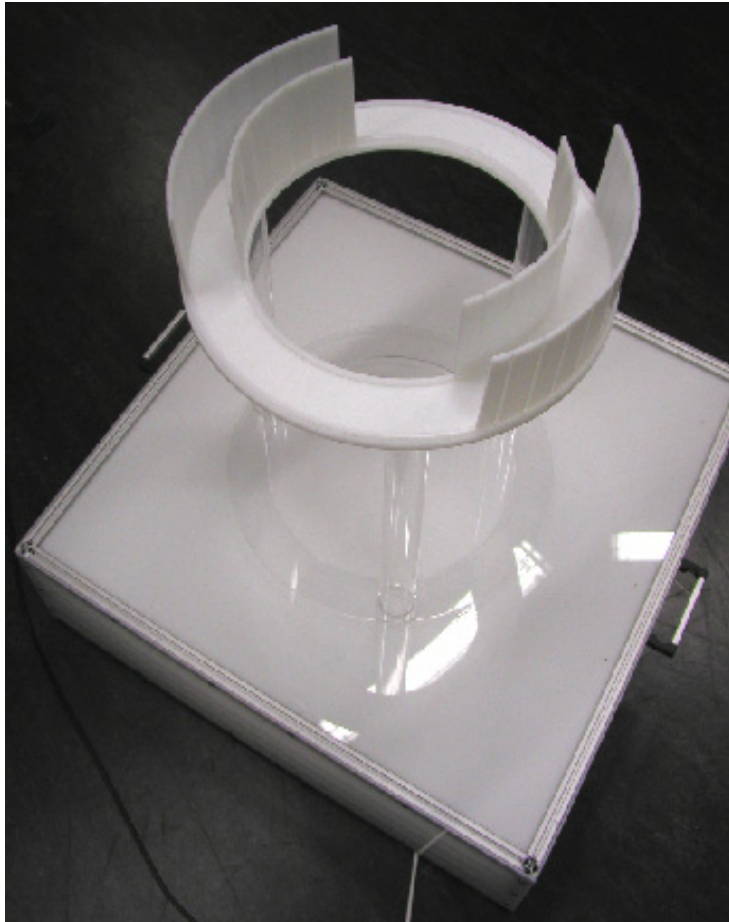
The IR box is powered by a power supply that allows to adjust the intensity of the IR illumination to the requirements of the setup.



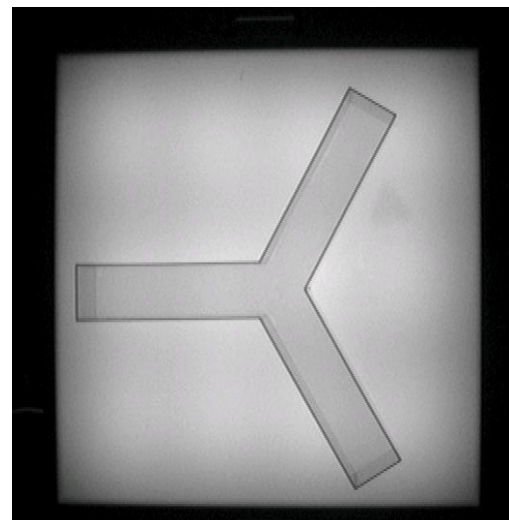
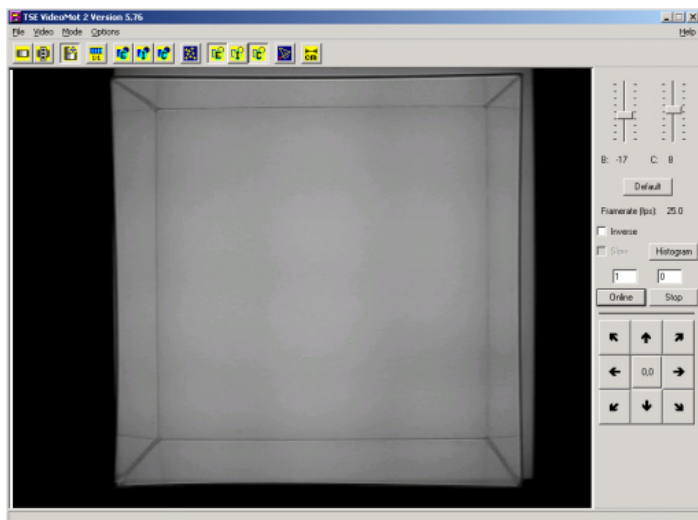
TSE Mazes (T-Maze, Y-Maze, Radial Maze, Zero Maze)
All pictures show the mouse version made from white PE



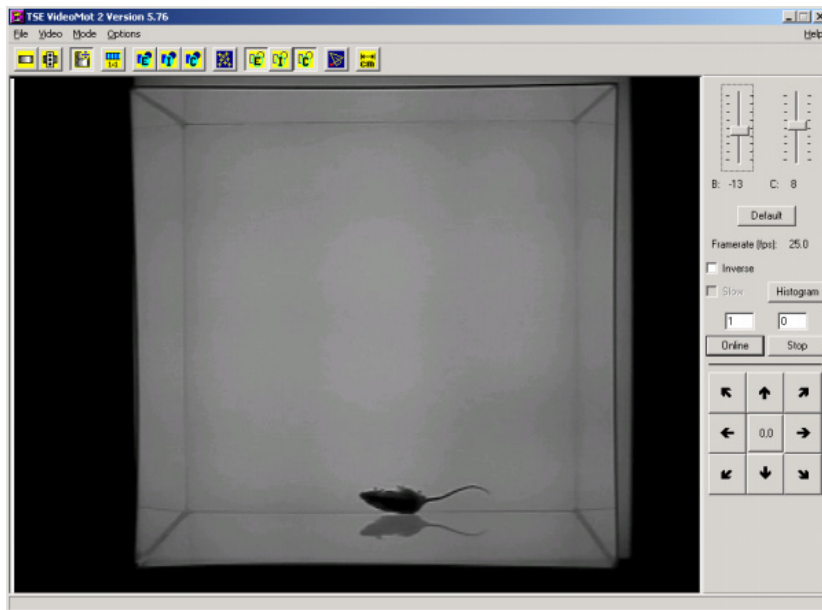
TSE Open Field with Rearing Indicator on IR Box



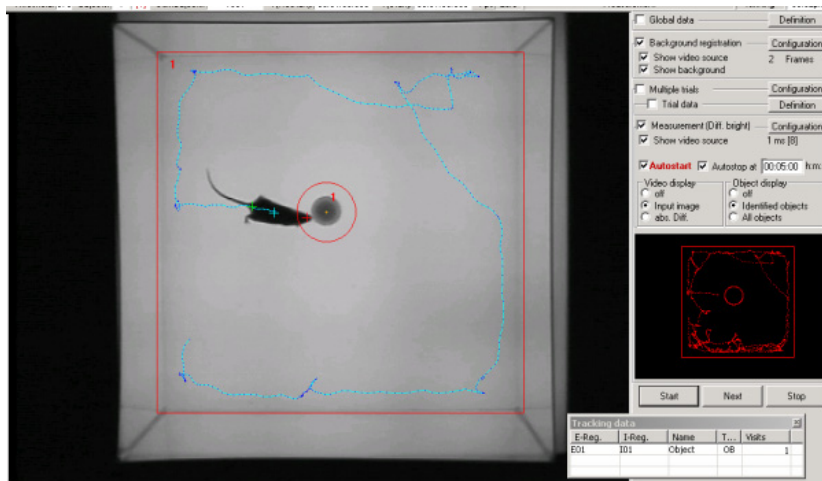
TSE Zero Maze Mouse on IR Box



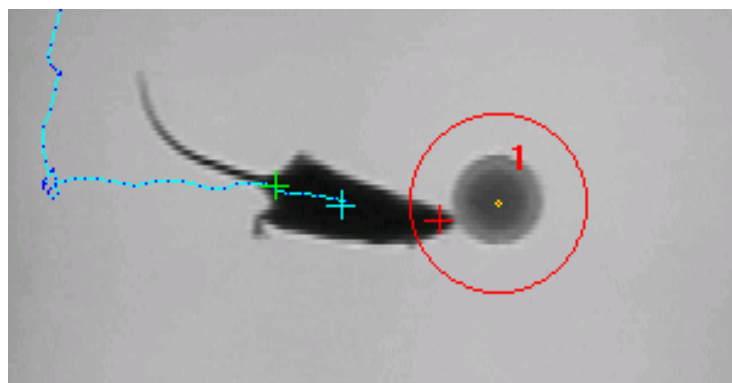
IR Box shown in total darkness
Left: With black Open Field *Right:* With black Y-Maze



Black mouse on IR Box in Open Field in total darkness



3-Point Tracking on the IR Box



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TSE_VideoMot2 IR Box and IR Test Cages_20110716.doc