



Analgesia
Anxiety
Depression
Activity
Behavior
Pharmacology

OF-3C

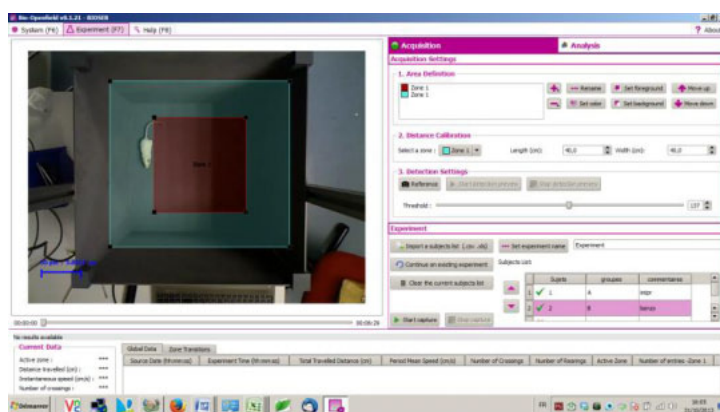
OPEN FIELD-3D: THE NEW 3D DETECTION

BIOSEB has designed a very innovative SETUP for the automation of the OPEN-FIELD TEST. OPEN field test is the most widely used test to evaluate anxiolytic or anxiogenic effects. Unfortunately none of the system currently available can record horizontal and vertical activity without adding a third component such as beam brake frames. BIOSEB innovate and now suggest A 3D sensor based technology capable of fine detection of rearing

The OF-3C is a dedicated software application that comes with its hardware to quickly analyze spontaneous locomotion of a rodent placed in a novel environment.

The 2 window software runs under XP, 7 8 computes and stores data in REAL time.

While it can be used with any sort of arenas of the market For 2D detection purpose, we provide the test with "all components included" when 3 D detection is needed



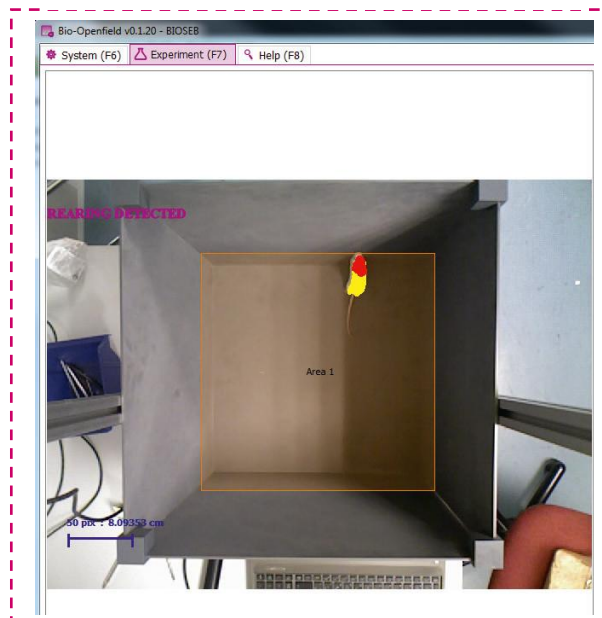
Benefits

BIOSEB R&D TEAM has focused its effort in designing a camera that can offer true 3 dimensional detection. The OF- 3C track the animal within the entire ARENA and record each of the REARING detected thanks to the predefined height with an accuracy of 1 mm over 1 mm 2 ! It perfectly matches the manual scoring. Thanks to its surface threshold and specific morphologic detection, the zones transition stick the reality. Drawing a zone is easy as possible using the predefined tool (name, color, form, layer priority for complex forms of zones..

Screen shot of a mouse rearing detection

OF-3C is available for rats and mice and features

- ✓ 3 D and eventually 2D detection for those who needs only XY detection.
- ✓ 1 mm accuracy in height
- ✓ Minimum surface detected 1 mm2
- ✓ Eligible to sniffing detection
- ✓ Designed for Rats or Mice.
- ✓ Optimized to be setup easily and starts with just THREE CLICKS.
- ✓ Easy to use, parameters are computed in real time.



Parameters

All parameters are computed by the OF-3C in real time and can be replayed changed the time base:

Three types of reports are generated:

Globals: Distance, speed, activity duration time in zone first cross, latency first entry....

30 parameters

Rearings: For each rearing: absolute time duration current zone, counts..

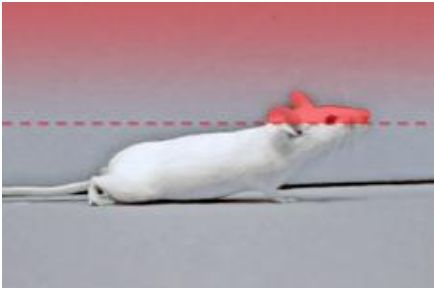
Transitions: a line for each transition detailing the previous zone the target zone the time number of crossing, entries

Our R&D team is currently evaluating the technology to finely detected sniffing against an object in the novel object recognition test. If you are interested or have an idea of development you want to share with us with this technology please contact us

OF-3C

Example of csv file generated

Source Date (hh:mm:ss)	Experiment Time (hh:mm:ss)	Total distance (cm)	Total Mean Speed (cm/s)	Period Mean Speed (cm/s)
13:47:24	00:00:28	174.3	8.6	0.2
13:47:23	00:00:27	174.3	8.6	2.5
13:47:22	00:00:26	171.8	8.7	8.3
13:47:21	00:00:25	164.5	8.8	6.8
13:47:19	00:00:24	157.9	8.9	22.9
13:47:18	00:00:23	134.7	8.5	4.4
13:47:17	00:00:22	131.2	8.4	6.1
13:47:16	00:00:20	125.6	8.6	3.6
13:47:15	00:00:19	122.1	8.8	0.0
13:47:14	00:00:18	122.1	8.8	0.1
13:47:13	00:00:17	122.1	8.8	3.0
13:47:12	00:00:16	118.5	8.8	6.2
13:47:11	00:00:15	112.7	8.7	11.3
13:47:10	00:00:14	102.2	8.7	7.4
13:47:09	00:00:13	94.2	9.0	8.4
13:47:08	00:00:12	85.4	9.4	11.7
13:47:07	00:00:11	74.3	9.4	9.3
13:47:06	00:00:10	63.7	9.0	5.2
13:47:05	00:00:09	59.1	9.0	1.5
13:47:04	00:00:08	56.9	9.1	6.7
13:47:03	00:00:07	51.0	9.1	10.4
13:47:02	00:00:06	40.6	9.0	7.9
13:47:01	00:00:05	32.6	8.5	4.9
13:47:00	00:00:04	27.3	8.7	5.7
13:46:59	00:00:03	21.2	9.0	3.0
13:46:57	00:00:02	18.4	11.0	16.9
13:46:56	00:00:01	0.0	6.3	0.2



Hardware included !

The OF-3C includes an enclosure for rat or mice manufactured within a special sandy surface to avoid reflexion and facilitate cleaning, this technique is very efficient. A special USB camera and the support for the camera.



Ordering

- **OF-3CM** Open Field setup for mice come complete with maze camera support and software licence
- **OF-3CR** Open Field setup for rats come complete with maze camera support and software licence
- **OF-3CB** Open field Software licence only to be used with any mazes and any usb camera.