MULTI SENSOR - Multi Modal Recording System for Behavioral Tracking (Ramot)

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It is clear today that brain activity of a restrained (or sedated) animal is completely different from that of a freely behaving animal.
That is why neuroscientists are seeking to find ways to study animals freely behaving on their natural grounds.
TAU's interdisciplinary research has led to the development of the MULTI SENSOR – Multi Modal Recording System for small animals, which is designed to enable recording the world as the animal senses it, without the need of transmitting the information.

SMALL IN SIZE AND WIDE IN FUNCTIONALITIES

The system has been developed by Dr. Yossi Yovel from the Department of Zoology and the Sagol School of neuroscience and Dr. Gabor Kosa from the School of Mechanical Engineering. The device, less than 10 grams weight, includes a camera, a microphone an accelerometer (9D sensor) and 2 analogue channels that can record physiological data such as neural activity or heart-rate. It can be easily carried by a rat.
Its design allows neuroscientists to enjoy the benefits of gathering the highest quality data in the optimal conditions.

- Minimized design – smallest of its kind – enables storing the data on the animal without the need of transmitting it
- Ideal for laboratories studying animal behavior in a confined environment or in the field. Sensory Information collected by the animal is gathered in video and audio formats while information about the activity of the animal can be followed by the accelerometer.
- Allows brain activity recordings

6 SENSORS IN ONE PACKAGE!

EASE OF USE

The MULTI SENSOR has external rechargeable power supply.
SD card can be easily replaced and downloaded.
It was specially designed to meet the requirements of lightweight (