

Sophisticated Life Science Research Instrumentation

 **NewBehavior**



# TraffiCage

Circadian Activity Measurements

- Economical
- Efficient
- Automated
- Group Housing



TraffiCage: Simplify Your Research



## TraffiCage

**TraffiCage is an easy-to-use solution to assess circadian activity of transponder tagged mice living in social groups using basic principles of the well-tried IntelliCage software.**

### YOUR BENEFITS

- **Small footprint**
- **Standardized reliable data**
- **Long-term, home cage analysis**
- **Simple, versatile set-up**
- **Rapid data generation: up to 20 animals per cage**
- **High-throughput**

### General Features

TraffiCage generates data on generalized and averaged activity for basic or group analysis. By using a large number of individual measurements, the system automatically differentiates between active and passive test animals within the same cage.

Thus, TraffiCage is ideally suited for high-throughput activity monitoring of rodents up to rat size. Applications include:

- Neurodegenerative diseases
- Activity-challenged rodent mutants or strains
- Circadian activity of social groups

### Specific Features

- Allows group housing of transponderized rodents during experiments
- Arrays of cages can be monitored simultaneously by a single controller PC
- Test and control animals can be kept in the same cage
- Several antennas detect transponder movements within their electromagnetic field
- Antennas are embedded in a measuring plate below the cage: no cleaning issues or animal hazard
- Signals are collected by a controller and fed to a PC or notebook located in or outside the animal room
- Continuously recorded variables include:
  - Movements of the animals

- Ambient temperature
- Ambient light changes (to record animal care; visitors etc.)
- Animal numbers to be analyzed simultaneously depend on local animal welfare regulations and cage size: Expect approx. 6 mice in a Type II long cage. In a Type III/150 cage, 10 mice may be housed.

### Data Handling

Data can be displayed either individually or as averaged scores of groups specified by the user. All data is saved in tables for statistical analysis by standard programs. Optionally, experimental progress can be monitored from the users' office via an intranet.

### Technical Information

#### Recommendations for the work environment:

- Temperature: preferably stable, 20-24°C
- Humidity: 50-60%
- Power supply: 110V/220V AC

#### Suitable for cage types:

- Type II, II long
- Tecniplast Type II IVC Greenline
- Type III
- Type IV, Tecniplast 2000 P
- Others: Please enquire