

TSE  
Technical & Scientific  
Equipment GmbH



# **TSE Startle Response System**

*Short Description*

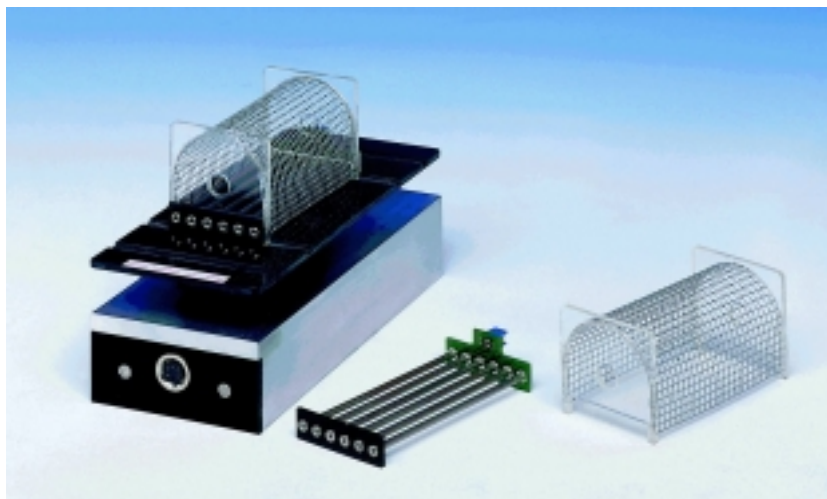
# TSE Startle Response System

Startle reflex in small rodents can be easily quantified with our new computerized startle response measuring system.



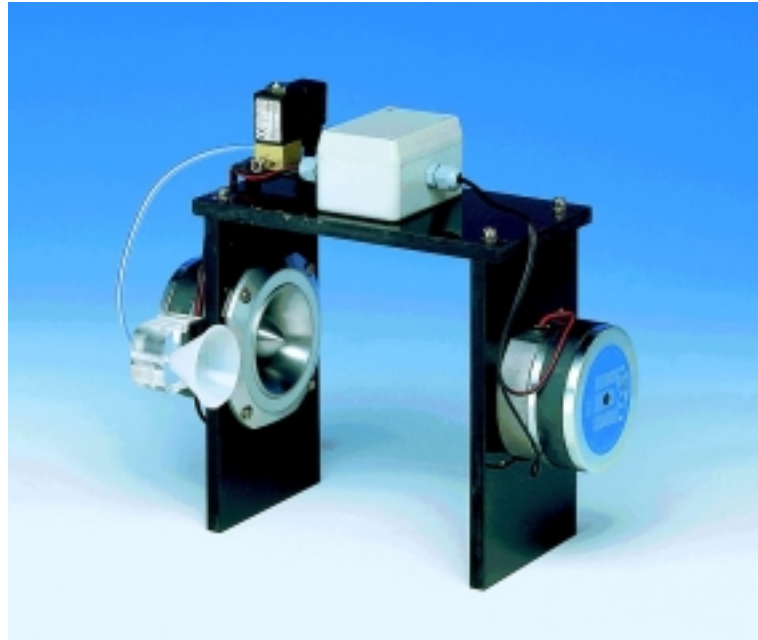
**2-Place Setup**

Animals are tested restrained in small holders - restricting major movements and exploratory behavior - that are mounted on species-specific load cell platforms.



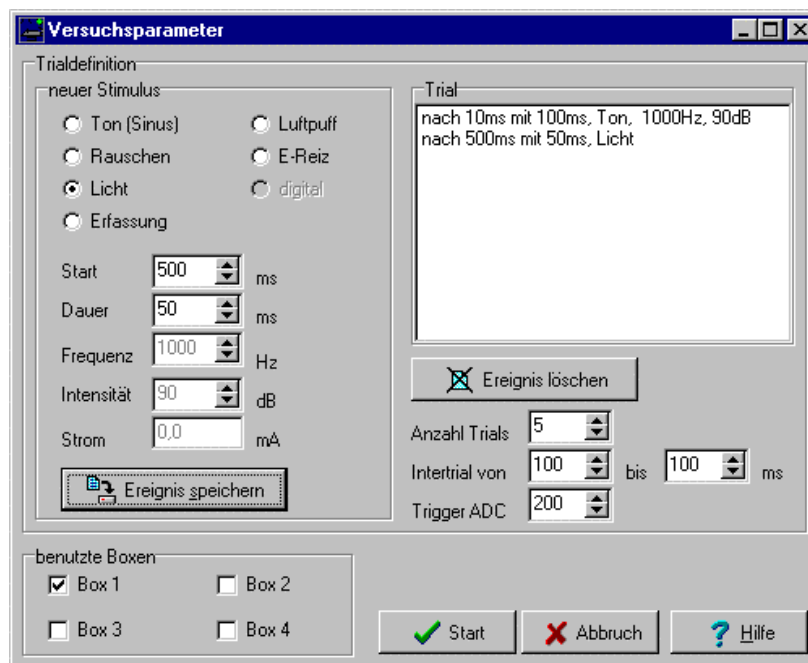
**Platform with restrainer and grid**

Intense auditory stimuli characterized by very rapid rise times are generated by means of high-quality high-linearity speakers. They can be combined with tactile stimuli (air puffs) to form user-defined trial sequences with variable inter-stimulus intervals.



For assessment of fear-potentiated startle an electrical stimulus (up to 3.1mA) can be applied using the integrated shock grid.

The flexible profile editor allows all standard tests to be created including complex “pre-pulse” designs to measure excitatory and inhibitory effects on startle.



After determination of baseline activity the startle reflex is triggered by exposure to stimuli. Reaction time, i.e. response latency, and startle amplitude for each trial are presented in results tables.



The whole setup is contained in sound-attenuating isolation cabinets. Up to 4 startle boxes can be operated simultaneously with one computer.

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