

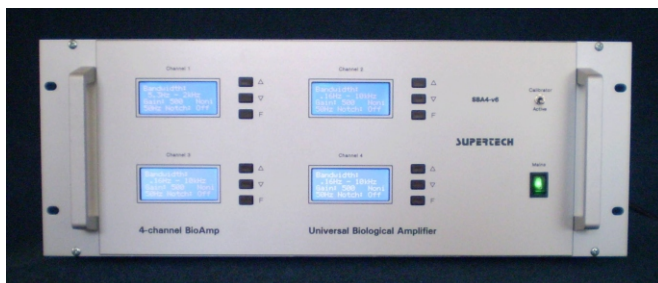
Stimulators for Brain Research

- Microprocessor-based programmable stimulators with square wave pulse output
- Isolated floating stimulator end-stages with extra small hum noise (with very small isolation capacity)
- Constant Current or Constant Voltage isolated output (selectable on-the-fly during the experiment)
- Light stimulator end-stages



Amplifiers for Electrophysiology

- Extracellular recording
- Intracellular recording
- Multi-unit activity and Field potentials
- Expandable multichannel configurations
- Preamplifiers with extra high CMRR
- EEG, EMG, ECG, Electroretinography



Behavioral Conditioning of Animals

In the Modular Behavioral System these modules are available currently:

- Power Supply
- USB System Controller
- 4-channel TTL Input control
- 4-channel TTL Output control
- Sound Generator End-stage
- DC shocker (1-channel, floating, isolated)
- DC Shocker Controller
- Windows-based Behavioral Control and Data Acquisition Program Package



In-vivo and In-utero Electroporator

- In-vivo electroporator for genetic manipulations in living animals
- Microprocessor-based programmable pulse sequence
- Exponential or square-wave pulse output
- 200V or 400V output voltage range



Ion Selective/Sensitive Amplifiers

- Independent IS and Ref channels
- Extremely high (10 TeraOhm) input impedance
- Very high bandwidth (up to 10 kHz)
- Independent offset voltage controls
- Analog and DAQ-based arithmetic
- Single or multi-channel versions



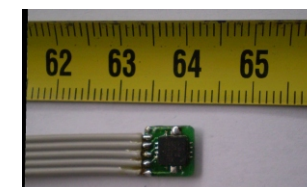
Biological Pressure Measurement

- Invasive blood pressure meter for small animal applications
- High accuracy: 0.1 mBar resolution
- Analog voltage output for computer-based data acquisition

Fast LED Driver for Optogenetics

- Output current: 5 to 110 mA
- Drives any kind of LED directly
- High accuracy: maximal error < 2%
- Overdrive Protection Circuit for LED

3D Accelerometer for Small Animals



3D accelerometer sensor with extremely small footprint. It is implantable and sanitizable.