

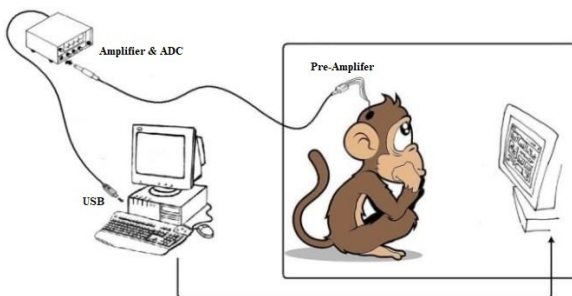
Introduction

NikroTekRezwan Electrophysiology recording systems meet all your needs for collecting and recording of different kinds of electrophysiology data. Users can establish a laboratorial system of cognitive sciences and perform control paradigm tests by this system. Neuron actions (Spikes and/or Local Field Potentials) are readable and recordable making use of associated special electrodes that can be located directly in an animal brain. NikroTekRezwan Electrophysiology recording system includes Preamplifiers, Conditioners and Analogue to Digital converters which are custom designed in order to be used in laboratorial and researching departments.

NikroTekRezwan electrophysiology recording system allows performing control paradigm in sophisticated tests by accepting digital inputs that are synchronous with analogue data. This system can also provide impedance measurement on customer demand.

Software

This system is supplied with specific software called **NeuroVISION**. Users can observe and record data within a simple and efficient environment, and can also adjust the sampling frequency, gain, and parameters of low-pass and high-pass filters for each channel. Spikes can also be detected with this software by defining several window thresholds. Recorded data can be exported to several state-of-art software formats including Spike-2, Neuro explorer, offline sorter and MATLAB.



دستگاه ثبت الکتروفیزیولوژی



Specifications

- High input impedance: 10^8 Ohms
- Low voltage and current noise: $20\text{nV}/\sqrt{\text{HZ}}$, $10\text{ fA}/\sqrt{\text{HZ}}$
- Particular circuits for electrode impedance measurement
- Controllable software filtering for selecting proper bandwidth of signal and reducing the noise
- Variable gains of 50-100-200-300-400-600
- Adjustable sampling rate up to 64kS/s
- Simultaneous recording of digital events
- Up to 24 bits resolution for sample rates below 32kS/s and 16 bits for above 32kS/s
- 16-channel (up to 32 channels on customer demand)
- User-friendly software for controlling and recording data
- Connection of all systems is through USB port