

NEW! EPOCH Key Features

Wireless Recording

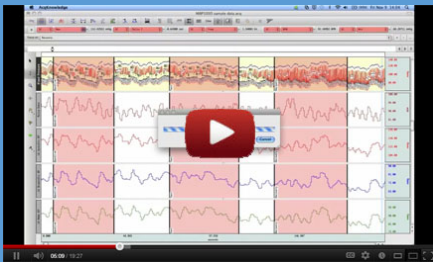
- Record from conscious rats and mice in their home cages
- Long term recordings (up to 6 month battery life, stop/start utility available)
- Two channel, implantable EEG
- Small sensors weigh less than 3 g
- Suitable for mice as young as P21

Analyze with AcqKnowledge

- Powerful automated routines for EEG:
 - Seizure Detection
 - Derive EEG Frequency Bands
 - EEG Frequency and Power Analysis
 - Derive Alpha RMS
 - Delta Power Analysis
 - Remove EOG artifacts
 - Compute Approximate Entropy
- Dozens of additional automated signal conditioning and analysis tools
- Video Tutorials on key features and analysis routines
- Guided channel and experiment setup, preset options for calculations

Key Technical Specifications

- EEG Bandwidth: 0.1 - 100 Hz
- Maximum animal size: 1 kg
- EEG Sensor Footprint:
 - Mouse: 7 mm x 9 mm
 - Rat: 7 mm x 12 mm
- 3 Gain Settings Available:
 - 2000x EEG, ECoG, LFP
 - 800x Status-Epilepticus
 - 4000x LFP/EEG in rat or mouse pups



Watch AcqKnowledge Tutorial Videos Online Now!

Record 2 Channels of Wireless EEG from Conscious Rats/Mice in their home Cages

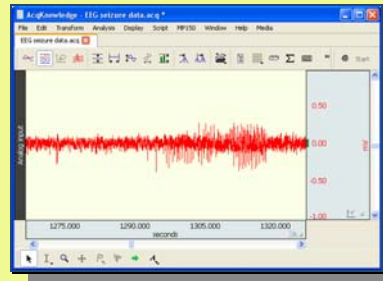
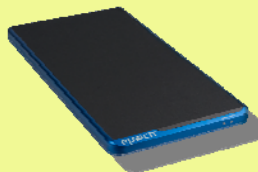
Use Epoch Systems with AcqKnowledge for long-term EEG/neural recordings up to 6 months



This wireless EEG system for rats or mice collects two channels of long-term wireless EEG/neural signals while animals are conscious and active in their home cages. Examine daily/nightly EEG activity or EEG responses to stimuli, interaction, drug dosage, and more!

The Epoch EEG Transmitter amplifies and transmits two channels of high-fidelity EEG data. Implants are small enough to be implanted into mice as young as P21.

Monitor animals during recording with BIOPAC multi-subject/multi-angle video monitoring systems and synchronize the video to the EEG recording in AcqKnowledge. This allows the researcher to see what the animal was doing during the exact periods of interest in the data file.



To record, the animal's cage is simply placed on top of the receiver tray with the implanted animal inside of the cage. EEG data from the sensor is telemetered to the receiving tray and then sent to the data acquisition system.

After recording, use the power of AcqKnowledge to analyze the EEG data. Automated EEG analysis routines including seizure detection, frequency and power analysis, and additional scripting options simplify and streamline the analysis process.

In addition, the fully customizable display and intuitive UI allow the user to easily monitor data and take measurements during or after recording. Use real-time filtering or calculation channels to display EEG frequency bands along with raw data.

Complete system includes Receiver tray, two 2-channel implantable EEG sensor transmitters, interface cables (2xCBL102), and Faraday cage to collect data from a rat/mouse housed in an industry standard home cage. Use BNC plugs on tray to easily connect to a BIOPAC MP150 data acquisition system (via UIM100C) or 3rd-party device capable of accepting signals within the ± 5 V range.

Optional EPOCH-ACTI Activation Utility allows you to receive batteries off (instead of factory-default on) and start batteries when you're ready to use them.

Contact BIOPAC to learn more or request a quotation!