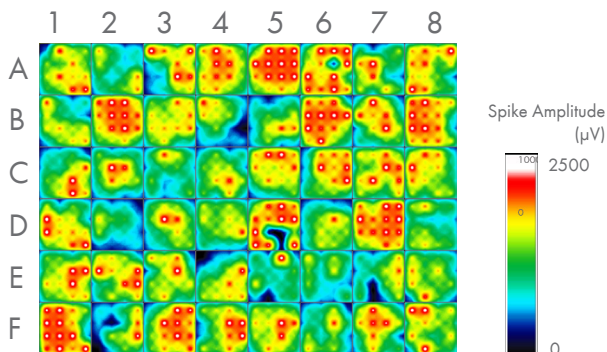


AXIS SOFTWARE

Powerful data doesn't have to mean complicated software. Axion's Integrated Studio software – AxIS – provides a straightforward, simplified approach to the setup, execution, and analysis of MEA experiments. AxIS interfaces with every Axion platform providing complete control of experimental parameters and access to critical network activity data with minimal user effort. With AxIS, control of all Axion technology is seamless, including environmental control, optogenetic stimulation, and automation.

REAL-TIME SIGNAL MONITORING

Easily manage experiments using the full-featured visualization tools in AxIS. AxIS records and displays action potentials on each electrode across the plate in real-time. View activity from every electrode on a well-by-well basis, or use plate-wide activity maps to get a broader picture of cellular activity at any time.



THE AXIS ADVANTAGE

- Intuitive, easy-to-use program that is used for both acquisition and analysis
- Fast, flexible setup
- Real-time signal monitoring
- Application-specific metrics to characterize the phenotypic behavior of a culture and quantify network activity
- Easy-to-use stimulation protocols allow you to take control of cellular behavior
- Data analysis tools for enhanced application-specific analysis



FAST, FLEXIBLE SETUP

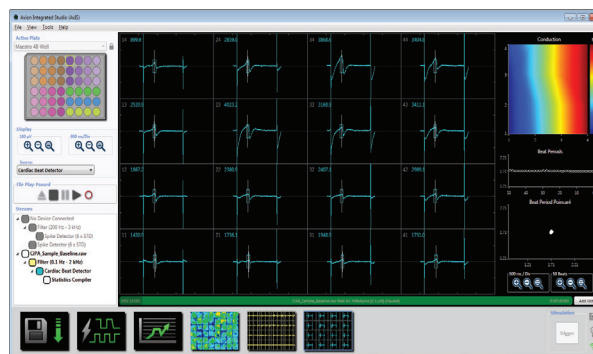
Time is valuable. AxIS software makes assay setup a breeze with pre-configured acquisition settings and importable treatment templates. Easily referenced color-coded plate maps provide all the information about your experiment in real-time, and treatments are saved in the data files for downstream analysis.



The Plate Map Editor allows easy entry of well treatment information and has import/export options.

AXIS CARDIAC DASHBOARD

Beating cardiomyocytes on an MEA plate behave very similarly to a clinical electrocardiograph. This allows *in vitro* characterization of depolarization and repolarization using a number of endpoints including beat rate, depolarization amplitude, field potential duration, and conduction velocity. To investigate cardiac safety for the Comprehensive *in vitro* Proarrhythmia Assay requirements, Axion created a specialized CiPA Analysis Tool, which allows accurate, predictive arrhythmia assessment.



The Cardiac Dashboard features all of the electrode, well, and plate real-time data displays plus cardiac-specific conduction velocity, beat period, and Poincaré plots.

AXIS NEURAL ANALYSIS

An enhanced suite of neural analysis tools makes analyzing neural activity data simple and straightforward. From simple activity measures such as mean firing rate to well-wide network bursting and synchrony quantification, AxIS provides a range of integrated and standalone tools to evaluate functional network behavior in neural populations. Use this information to develop a more accurate disease model, study drug effects, and/or evaluate a compound's safety over time.



The standard data displays are augmented with a real-time Raster plot displaying the activity over time for all electrodes in the well, making it easy to see the network activity organization and synchronous responses across the well.

DATA ANALYSIS TOOLS

Axion BioSystems is committed to meeting customer demands for easily accessible, comprehensive data. We provide special purpose tools for rapidly analyzing data and generating publication-ready figures.

