

Axio Examiner

System Solutions for Electrophysiology

Finding a suitable micromanipulation system is an essential prerequisite for complicated electrophysiological research projects. The Axio Examiner fixed-stage microscope produced by Carl Zeiss and the EXFO micromanipulation system form a cutting-edge combination that provides a fully integrated, first-class system solution.

Axio Examiner

Developed on the basis of real-life research projects, the new Carl Zeiss fixed-stage microscope has been perfectly tailored to the specific requirements of electrophysiological applications. An innovative reflector turret and a highly specialized optics design serve to maximize the available space to an extraordinary degree, which means there is plenty of room to position micropipettes. The contrasting methods range from simple oblique illumination to Dodt Gradient Contrast and DIC. All the options are accessible directly from the front of the stand and can be used in either VIS or IR. All in all, this is the perfect platform for EXFO's highly sophisticated piezoelectric micromanipulation systems.

EXFO Micromanipulation

The Burleigh® product line from EXFO is the world leader in piezoelectric positioning systems and high performance mounting solutions for electrophysiology. Using unique piezoelectric technology, Burleigh® micromanipulators enable extremely smooth, precise positioning, and ultra-high stability. The field leading Burleigh® Gibraltar® Mounting Platform and X-Y translator offers a wide open working space and the ability to move effortlessly between fields of view without disturbing an established patch. Burleigh® workstations maximize ergonomics and control, providing the ideal solution for discerning physiologists.



**The New Class in Fixed-Stage Microscopy Meeting
the Precise Piezoelectric Positioning Systems and
High Performance Mounting Solutions from EXFO**



We make it visible.

Burleigh®

Piezoelectric Technology for Smooth and Precise Positioning



System components

- Fixed-stage microscope: Axio Examiner from Carl Zeiss
- Micromanipulation: Burleigh® product line from EXFO

With electrophysiological experiments spanning a wide range, micromanipulation systems are required to have very dedicated characteristics. The table on the right shows an overview of the key components. You can find more detailed information at: www.exfo-burleigh.com

AT A GLANCE – MICROMANIPULATION FROM EXFO

Gibraltar® Platform and X-Y Translator	Complete solution for fixed-stage upright microscopes. Smooth and precise motion between fields of view, leaving sample untouched. Available in manual or motorized, stainless steel or aluminum. Open, elevated platform allows manipulators, chambers, and other instruments to be installed with optimum mechanical and thermal stability.
PCS-6200-T Micromanipulators	Intuitive, ultra-precise positioner ensuring best results and high productivity. Long travel motors give flexibility for coarse positioning and piezoelectric technology provides extremely smooth, precise movement for the final patch. Configured specifically for traditional slice work, the Burleigh® PCS-6200 micromanipulator combines fast, easy pipette changes with motorized easy-set memory positions and PC software to provide greater efficiency and experimental control. Piezo Travel: 150 µm (PCS-6200) or 300 µm (PCS-6400) Motorized Travel: 25 mm Resolution: < 60 nm Piezo, 1.6 µm minimum step motor Drift: < 1 µm/hour
PCS-500-SSH Steep/Shallow Headstage Adapter	Orients the headstage and pipette holder at very shallow/shallow angles. Greatly simplifies pipette exchange and provides extreme versatility in manipulator placement.
Recommended Workstation Packages	<p>Dual Patch Dual PCS-6200-T (right- and left-handed manipulators) 2x PCS-500-SSH Gibraltar-AE-1-SS-MTR (with base plate, stainless steel, motorized) Gibraltar-SP-1 sample mounting plate</p> <p>Single Patch PCS-6200-T PCS-500-SSH Gibraltar-AE-1-SS-MTR (with base plate, stainless steel, motorized) Gibraltar-SP-1 sample mounting plate</p>

Carl Zeiss MicroImaging GmbH
07740 Jena, Germany

BioSciences | Göttingen Location
Phone: +49 551 5060 660
Telefax: +49 551 5060 464
E-Mail: micro@zeiss.de

www.zeiss.de/axioexaminer