

## **XENOWORKS™** MICROMANIPULATOR

## The XenoWorks Micromanipulator

has been designed around our hugely-successful MP-285 electrophysiology micromanipulator, with the addition of a smooth-moving adjustable inverted joystick. Because the motor drive is based on an electrophysiology design, the XenoWorks Micromanipulator is extremely stable and resistant to ambient vibration. This stability also makes this manipulator an ideal platform for use in conjunction with the PrimeTech Piezo Impact Drives (PMM-150FU and PMM-4G), for applications such as mouse nuclear transfer and intracytoplasmic sperm injection.

The joystick offers an unprecedented level of user comfort during operation. The use of an inverted joystick in conjunction with an almost zero-profile base allows the operator to rest their hands and forearms on the bench surface, reducing the risk of repetitive strain injuries. The function keys can be located and activated by touch, removing the need to look away from the microscope, which will save time.

Another time saving feature is the "Setup" function. Activating the setup function places the micromanipulator in the optimum position prior

to beginning work (halfway on the Y-axis, threequarters down on the Z-axis and three-quarters inwards on the X-axis). Once the manipulator is in the default setup position, the micropipette tip will already be projecting into the microscope's optical path, reducing the time taken to find the pipette tip through the microscope. This also ensures that there is adequate travel range in all axes of motion prior to starting work.

The manipulator uses a pre-programmed "Home" position for fast micropipette exchange, and the ability to determine a "Work" position so the pipette can be repositioned with the press of a button. A Y-axis lockout function allows X-only axial movement for maximum control during injections, and a Z-limit memory position is used to prevent the pipette from colliding with the bottom of the dish.

The XenoWorks joystick was carefully designed to allow any user to immediately develop an intuitive feel that makes it easy to precisely control position. Movement of the joystick is directly converted to a proportional movement of the manipulator. Control of the scale factor, the center of travel and programmable positions are right at your fingertips.

**BRML** XenoWorks Micromanipulator (Left) Includes: 3 axis motor drive (left-hand configuration), motor drive base plate, controller, joystick user-interface, connecting cables, and manual

**BRMR** XenoWorks Micromanipulator (Right) Includes: 3 axis motor drive (right-hand configuration), motor drive base plate, controller, joystick user-interface, connecting cables, and manual

SUTTER INSTRUMENT