



FOUR INDEPENDENT AXES – 30mm TRAVEL
IN DIAGONAL FOR COAXIAL PIPETTE
MOVEMENT, 25mm TRAVEL IN X, Y AND Z

USER-FRIENDLY, FANLESS COMPACT CONTROLLER
WITH ROE PRESERVES BENCH SPACE

SUB-MICRON 100nm RESOLUTION

TRUE DIAGONAL ASSURES COAXIAL MOVEMENT

SUITED FOR *IN VIVO* ELECTROPHYSIOLOGICAL
RECORDING

QUIET MODE ELIMINATES ELECTRICAL NOISE

PUSH BUTTON CONTROL OF MULTIPLE FUNCTIONS –
WORK, HOME, QUIET, PULSE AND RELATIVE

ROBOTIC HOME AND WORK POSITION MOVES
FOR EASY AUTOMATED PIPETTE EXCHANGE

USB INTERFACE FOR COMPUTER CONTROL



QUAD[®] FOUR-AXIS MICROMANIPULATOR SYSTEM

QUAD[®], the newest Sutter Instrument motorized micromanipulator, is easy to use and features four independent axes. Each axis has a 25mm range of motion, a digital display of position, and an ROE control. The compact, intuitive controller takes up minimal bench space, is fan free, and is easy to use. Three axes provide the X, Y, Z-orthogonal motion typical of most motorized micromanipulators. In the **QUAD**, Sutter introduces a true fourth axis to move the electrode coaxially at exactly the desired angle of approach. The fourth axis has 30mm of travel that significantly extends the range of travel for the system.

The **QUAD** is very easy to operate. The ROE inputs for each axis allow facile manual control

of electrode position. Five conveniently located buttons control all of the basic functions that you will need in normal operation. Press and hold the Work button to quickly store a work position; press Work again and the manipulator will return to the same location. Home sends the manipulator to an initial location that is useful for changing electrodes. When you are ready to begin collecting data, the motor drive, electronics can be suppressed by pressing Lock. Display coordinates can be zeroed at any location by pressing Relative; go back to absolute coordinates by pressing Relative again. Finally, Pulse activates a pulse movement mode that produces small, rapid bursts of motion that can be advantageous for sharp electrode cell penetration.

QUAD Basic System

- QUAD-L** QUAD 4-axis manipulator – left-handed setup
- QUAD-R** QUAD 4-axis manipulator – right-handed setup

Fixed Stage Platform

- MT-78-FS** Fixed platform stage with imperial/standard holes, chamber insert and gantry supports
- MT-78-FS/M6** Same as above with M6 tapped holes

Manipulator Columns

- MT-75** Standard gantry stand 8.7 to 13.4 in (22.1 to 33.9 cm)
- MT-75S** Short gantry stand 6.7 to 9.6 inches (16.9 to 24.4 cm)

Accessories

- 285204** 4 inch dovetail extension
- 225RBI** Rotating base for MP-225
- 221165** Z-axis vertical extension
- BR-AW** Rod holding clamp for XenoWorks injectors (for rod OD of 2 to 4mm)
- MP-ROD** Rod holder (for rod OD 6.25mm or larger)
- MP-RISER-0.5¹** 1/2 inch riser
- MP-RISER-1.0¹** 1/2 inch riser

¹ Risers can be combined to achieve desired height.



SUTTER INSTRUMENT

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