

Manual MicroStage Series

Features

- ▶ 25mm total motion on XY axes
- ▶ Manual micrometer position adjustment
- ▶ 1 μm vernier scales
- ▶ Integrated, continuous position locking
- ▶ Fits inverted microscopes and can be customized for other optical setups
- ▶ Highly stable

Typical Applications

- ▶ Coarse positioning for high resolution nanopositioning stages
- ▶ Direct replacement for standard, non-locking microscopy stages



Manual MicroStage (2-axis) constructed from aluminum.

Manual MicroStage shown with the Nano-LP100 3-axis nanopositioner (silver colored in picture) and optional breadboard assembly.

Product Description

The Manual MicroStage is a high precision, low profile, XY stage with integrated position locking for use with all standard inverted optical microscopes or customized for other mounting requirements. Designed specifically as a coarse positioning base for use with high resolution nanopositioners, the Manual MicroStage provides 25mm of travel on each axis combined with micrometers with 1 μm vernier graduations for precise adjustments. An internal pre-load force of 10 N built into each axis ensures that the Manual MicroStage is continuously locked securely in position and is able to resist forces transmitted by high speed nanopositioners mounted to the top surface of the stage. Standard microscope stages, without position locking, often drift out of position as a result of

acceleration forces produced by a nanopositioning stage as it moves through a scanning sequence. Elimination of drift is critical to proper sample imaging and raster scan alignment. An optional breadboard assembly with threaded mounting holes (1/4-20 on a 1 inch pattern or M6 on a 25mm pattern) is available to provide a convenient mounting surface for probes or other experimental assemblies. Standard Manual MicroStages are offered for the following inverted microscopes: Olympus IX/IX2 Series, Nikon TE2000/Ti Series, Leica DMI Series, and Zeiss Axiovert/Axio Observer Series. Manual MicroStages designed to fit other setups, including direct mounting to optical tables, may also be requested.

Technical Specifications

Axes of motion	XY
Ranges of motion (XY).....	25mm
Graduations	10 μ m
Vernier graduations	1 μ m
Body Material	Aluminum

