

NanoScanZ NZ400CE Nanopositioning Piezo Z Stage

For Use with Motorized and Manual Stages





Inset Photo: NanoScanZ Piezo 400 micron stage mounted on a Prior Scientific ProScan[™]III H117 motorized stage.

Features:

- 400 microns of travel
- · Large well plate format
- · Nanometer level repeatability
- · Closed loop control utilizing sub-angstrom resolution piezo resistive sensor

Prior Scientific proudly introduces the latest innovation in microscope automation - the NanoScanZ Piezo Stage System. With 400 micron travel, the NanoScanZ is well suited for researchers producing rapid Z sections and 3D images of live cells and other specimens grown in well plates and other large sample dishes. The NanoScanZ stage systems offers nanometer level repeatability and closed loop control utilizing a sub-angstrom resolution Piezo resistive sensor. The NanoScanZ complements the speed of the newest digital cameras and accomplishes in milliseconds what would take seconds for conventional rotary focus drives.

The NanoScanZ Piezo stage system features:

- 400 micron travel
- Large well plate format
- Nanometer level repeatability
- Closed loop control utilizing sub-angstrom resolution piezo resistive sensor
- RS232/USB or Analog (0-10V) control
- Compatibility with software already programmed to control piezo objectives
- Compatible with DIC techniques
- Easy to view display screen for position and set up parameters

By moving the sample instead of the objective the NanoScanZ offers enormous benefits over existing objective based Piezo systems including;

- · Quicker movement and settling
- Flexibility to create Z stacks with multiple objectives
- No rotating wires to twist and break
- RS232/USB or analog (0-10V) control
- Compatibility with software already programmed to control piezo
 objectives
- Compatible with DIC technique



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Drawing



NZ400CE Specifications

Specification	Description
Range of Motion	400 microns
Repeatability	5 nanometer
Step Response	20 milliseconds
Accuracy/Linearity	0.5% of travel
Resonant Frequency	550 Hz (+/- 20%)
Inplane Tilt	20 micron rad typical
Operating Temp. Range	5 to 50 degrees C
Body Material	Anodized aluminum
Stage Control Input	Analog (0-10VDC) RS232/USB
Power Requirement	90-240V AC
Output Position Signal	0.0-10.0V

Ordering Information For Z Axis Piezo Stages

Part Number	Description
NZ400CE	Z axis 400 micron travel piezo stage with closed loop nanodrive controller

Ordering Information For NZ400 Inserts

Part Number	Description
NZ301	Microtitre plate holder (85x128mm) for NZ400
NZ302	Universal specimen holder (slides, petri dishes, flasks) for NZ400
NZ303	Slide holder for one 76x26mm microscope slide for NZ400
NZ304	Terasaki plate holder for NZ400



Worldwide distribution

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