Focus Assist

Model ID: MF-4456

XY Translators for Locating Probe

Motor for Optical Focus Control

Focus Assist

* Accurate focus control

* Facilitates rapid probe approach

* Follow probe when making tip approach

* Control focus while AFM is in acoustic box

The focus assist option replaces the manual optical microscope support on the TT-AFM. This option includes video optics, control electronics and control software. Installing the focus assist mechanical assembly is simple, requiring only a few socket head screws/replacements.
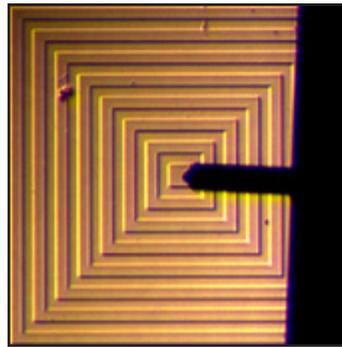
Included with the focus assist is the same optic offered on the TT-AFM. The optic has a 7:1 mechanical optical zoom and gives a resolution of <2 μm. The optical microscope offers a fantastic advantage when locating surface features for scanning and positioning the laser onto the cantilever.

SOFTWARE

Software for **Focus Assist** is integrated with the AFMControl software used on the TT-2 AFM. Using the software is easy. Simply focus the optical microscope on the probe, and then on the sample. Once this registration is completed, you can use the software to move directly to the sample, to the probe, or you can even have the optic follow the probe during probe approach.

With **Focus Assist** it is possible to rapidly zoom into a specific area of a sample with extreme accuracy, facilitating highly successful scanning.

► **Video Microscope**

	Minimum Zoom	Maximum Zoom
Field of view	2 X 2 mm	300 X 300 u
Resolution	20 μm	2 μm
Working Distance	114 mm	114 mm
Magnification	45 X	400 X

Stepper Motor Driver:
» Phase: 4
» Operating Voltage: 24
» Min Step Size   330 nm
» Max. slew rate: 100 mm/min
» Range   30 μm

Software:
» Operating Functions:
    PROBE - Moves the focus to the probe
    SAMPLE - Moves the focus to the sample
    FOLLOW - Causes focus to follow probe

Setup Functions:
» Focus on probe
» Focus on sample
» Stepper motor size