Image Logger

Model ID: IL-3478

Image Logger Features

* View forward and reverse images for six channels

* Display real time oscilloscope-data logger for 6 channels

* Visualize the spectrum of the 6 data channels

A great advantage of an atomic force microscope is that it can capture several types of images. Each type of image reveals critical information about the surface topography or physical parameters.

It is possible to display up to six channels from the Z feedback control loop in an atomic force microscope. These include:

1 - Z Error
2 - Z Drive (topography)
3- Z Sensor
4 - Phase
5 - L–R (friction)
6 - Amplitude

Additionally these channels may be displayed in the forward and reverse scan directions. With the data logger it is possible to display all six channels of data in the forward and reverse direction. This capability allow real time visualization of all channels.
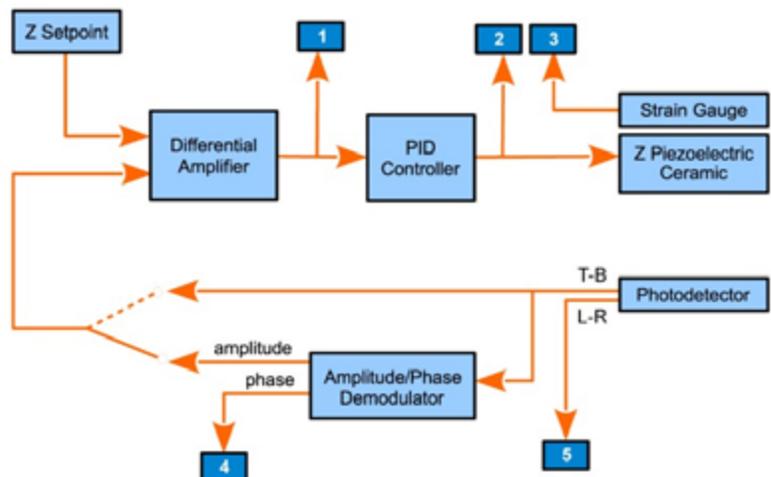
SPECIFICATIONS

ADC
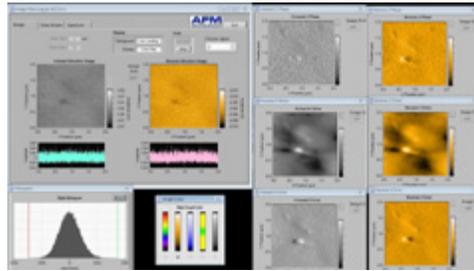» Number 8
» Bits 16

Environment: Labview

Signals Captured
» Z Drive
» Z Sensor
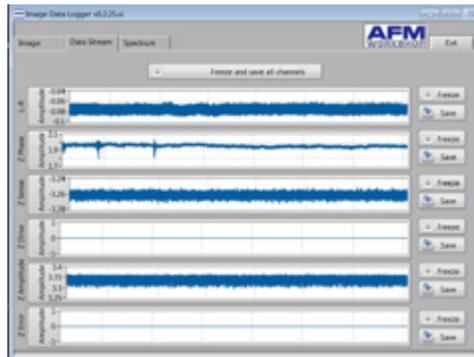» Z Error
» L-R
» Z Amplitude
» Z Phase

Computer
» PC Type (i3 or greater)
» 23" Monitor
» Wireless Keyboard and Mouse

► ### Image Logger

The image logger simultaneously displays six image channels in forward and reverse directions. During scanning, the palettes and the histogram can be updated. Once a scan is completed, all six images can be saved.

► ### Real Time Oscilloscope

The data stream from all six input channels is displayed in the oscilloscope tab. This function is always available when the system is not scanning and when the AFM is scanning.

► ### Spectrum Analyzer
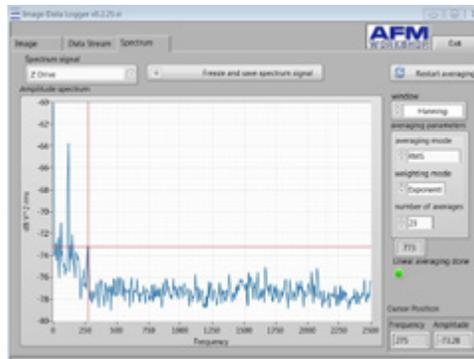
The spectrum of one input data channels can be displayed. Several types of windows and averaging algorithms may be applied to the incoming data stream. Identifying sources of unwanted vibrations is possible with the spectrum analyzer function.
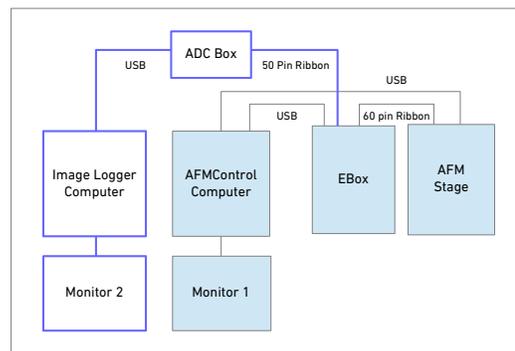
Block Diagram illustrating AFM system with Image Logger Option