

Keyence VHX-5000 Microscope

Keyence VHX-5000 Microscope



Tool Type: "Observation"

Location: "Microfluidics Lab"

Supervisor	Tool Lead
David Bothman	Eric Lemieux
(805) 893-4125	(805) 234-8919
bothman@cnsi.ucsb.edu	ericlemieux@ucsb.edu

Description: "Microscope"

Manufacturer: "Keyence"

About

The Keyence microscope is a semi computer controlled microscope that is capable of taking precision measurements from large depth of field images under high magnification. This microscope features both backlighting and top lighting, and has a computer controlled movable stage which can be used to pan across the object you are viewing. This microscope has a motorized objective which can be used to image parts with a large depth of field to create a single in focus image with depth mapping data. The motorized stage also allows for the stitching of several images to create larger high magnification pictures.

Training Documentation

[Keyence SOP](#)

Detailed Specifications

- 17 mm/s Z travel
 - Objective rotation up to 90 degree angle from normal stage axis
 - Image stitching up to 20,000 x 20,000 pixels
 - Optical zoom from 0 to 1000x
 - 50 FPS max framerate
-

Safety Concerns

- Do not leave lighting elements on
 - Do not crash the objectives
 - If replacing the bulb in the MI-150 wear gloves to avoid getting oil on the halogen lamp bulb
-

Reference Documentation

[STL Converter Manual](#)

[Brochure](#)

[Field of View and Pixel Size Chart](#)

[Intermediate Quick Start Guide](#)

[Quick Start Guide](#)

[Exporting 3D data to CSV](#)

[CSV to STL project documentation](#)

[VHX lenses](#)

From:
<https://microfluidics.cnsi.ucsb.edu/wiki/> - Innovation Workshop Wiki

Permanent link:
https://microfluidics.cnsi.ucsb.edu/wiki/doku.php?id=keyence_microscope&rev=1623088214

Last update: **2021/06/07 17:50**

