



Discovery-Z

Next-Gen, Motorized Comparison Microscope

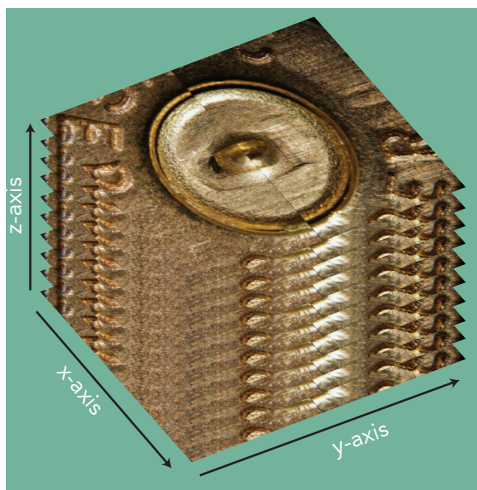
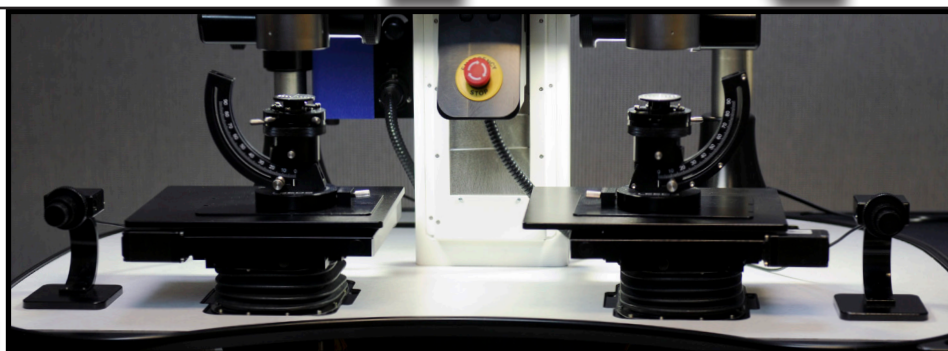
Discovery-Z is a fully-motorized firearms comparison microscope, providing synchronized and independent motorization of both stages and the focus movement. These innovative stages allow the examiner to measure sample features in *both* the X and Y axis on the left stage.

Discovery-Z enhances the workflow for a firearms examiner. The stages are operated by two positionable controllers with real-time tactile response and use a synchronous feature that allows the examiner to adjust each stage individually or both stages simultaneously, with 95 x 95 mm travel in X & Y axes.

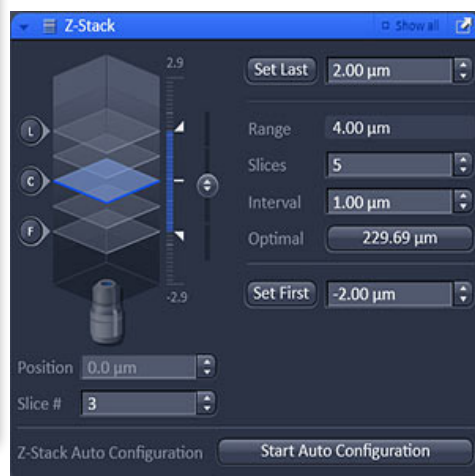
Discovery-Z offers over 900 matched magnification set points and 23mm field of view.



Designed with two 9" x 7" free-standing platform stages, the *Discovery-Z* allows an examiner to easily access the work area from all sides, accommodating larger articles of evidence for analysis.



Z-Stack Images



Discovery-Z directly interfaces with the Zeiss Zen software, providing control of the camera and the 3-axis motorized stages, as well as reading the microscope meta data to include in the image files. The *Discovery-Z* software/hardware package also offers examiners the option for automated control of Z-Stack and tiled images.



Discovery-Z Specifications

- Two 3-axis motorized stages.
- Coarse/fine adjust of stages.
- Independent or synchronous operation of stages.
- Operate stages from 3-axis controller or from Zeiss Zen software.
- ISO/IEC 17025:2017 accredited calibration measurement of X and Y axis using Zen software.
- Optional motorized Extended Focal Imaging available.
- Optional motorized Panorama (stitching) Imaging available.
- Motorized zoom-based magnification systems
- Primary magnification range of 7.5X to 148X.
- Motorized zoom range of the microscope has over 900 individual steps.
- Magnification is matched with less than 1% variance.
- NIST traceable, ISO/IEC 17025:2017 accredited, Certificate of Magnification Matching.
- Integrated camera port with 100% ocular or 70/30 ocular/camera settings.
- Parfocal and Parcentric optical system.
- 23 mm Field Number.
- Plan Apochromatic Objectives.
- Continuous 60 mm working distance (with 1X objective.)
- Built-in aperture diaphragms for all magnifications.
- Erect and unreversed images.
- Single hand control Mask Adjuster to compare sample images from 100% right to 100% left, having a divide of any width, or superimposed in any percentage.
- Universal sample holder requires no additional components; holds samples as small as 0.03" wire and as large as a 10-gauge shotgun shell.
- A third eyepiece holder and pin-mount tray on the column for easy storage and access.
- Ergonomically designed workstation, providing a stable, height-adjustable, motorized bridge column and tilting binocular, positionable stage controllers for optimized ergonomic comfort to minimize repetitive "hand-over-wrist" motion, and a microscope table top that includes a cut-out front indent allowing for closer access to eyepieces for various size users.
- Two fluorescent illuminators mounted on adjustable articulated arms, and include bright quad-lamps and offer a rotating hood to control sample contrast.
- Anti roll-off protection edge on the table work surface
- Optional dual view kit available

Stage Movement	X-Axis (mm)	95
	Y-Axis (mm)	95
	Z-Axis (mm)	36
Stage Size	X - Y (mm)	177 x 228
Stage Measurement Range	X-Axis	0-3.75" (95 mm)
	Y-Axis	0-3.75" (95 mm)
	Resolution	0.0005" (0.01 mm)



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