THE NEXT-GENERATION SOLUTION FOR FORENSIC EXAMINATION

MST-2

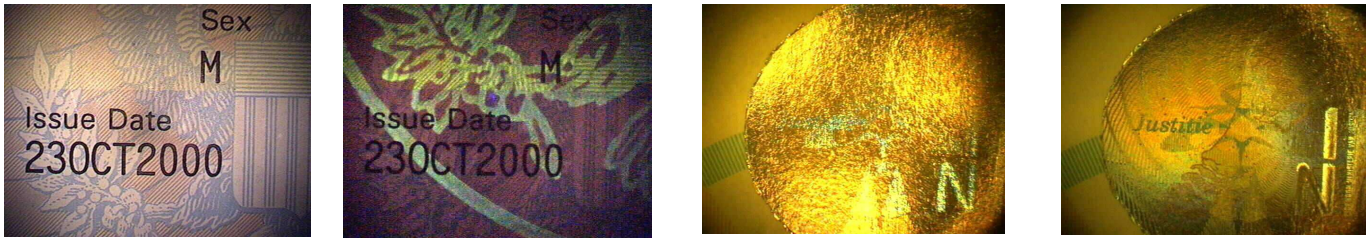
Some key features:

* The highest technology in authenticity determination of different types of documents, including banknotes, passports - directly and very quickly
* High resolution color and infrared imaging techniques
* On-line color imaging and scanner modes of operation
* Optical magnification from x70 to x420 (x20 to x1680 using low and high magnification auxiliary lenses and digital zoom) for precise examination of microscopic objects / specimens on the standard 21" display monitor
* Advanced on-line digital processing techniques and direct analysis of documents for their originality and writing line sequence indications
* 3D visualization of overlapped writings

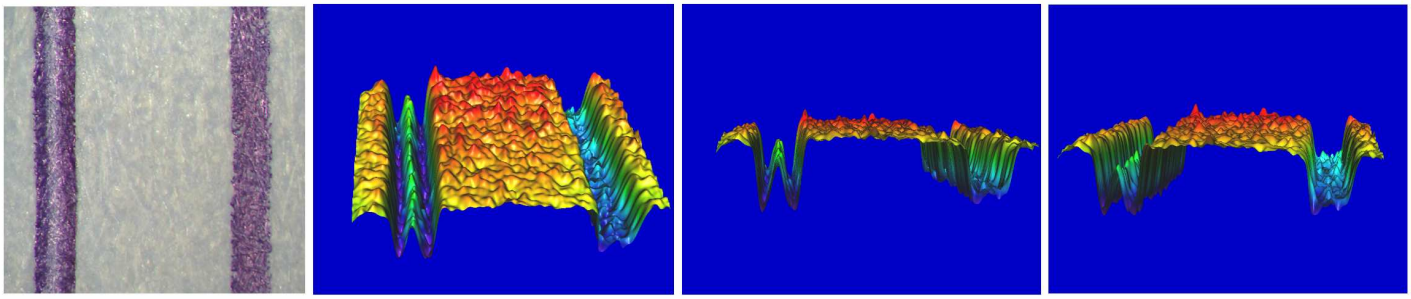
Specific application examples

High resolution RGB color imaging and capturing

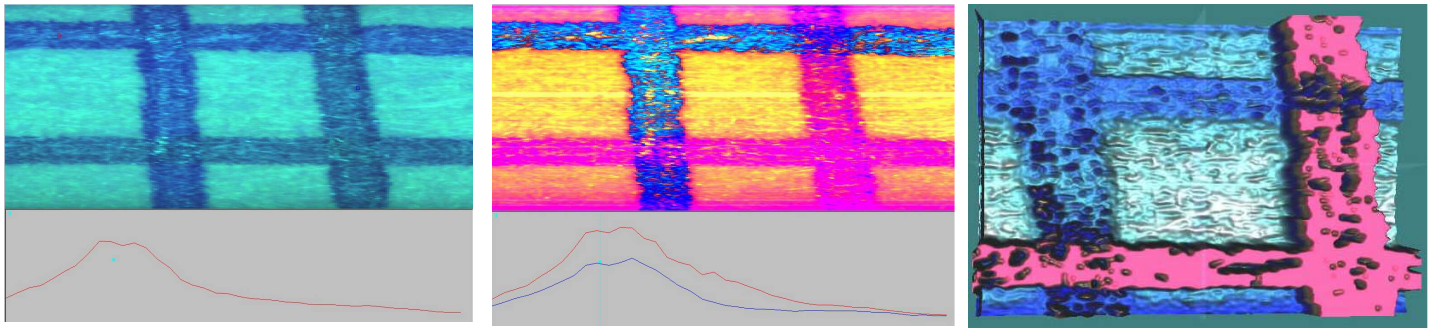
Comparing images by screen splitting and overlaying each other



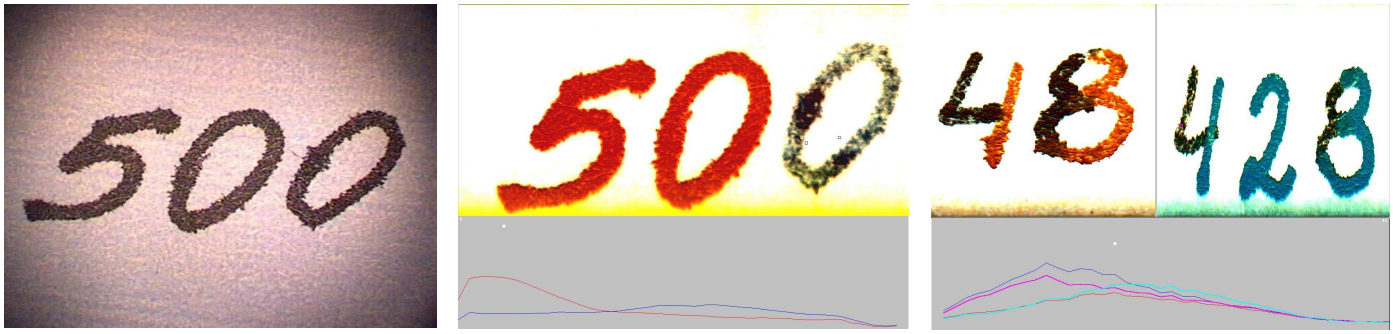
Examining UV activated and retro-reflective or holographic security features



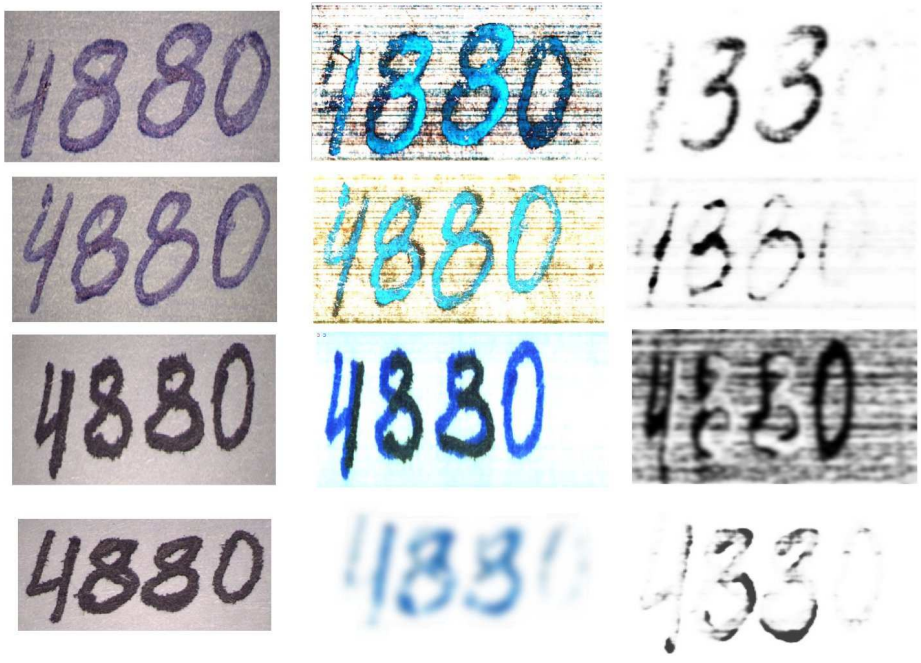
3D visualization of different type pen writings



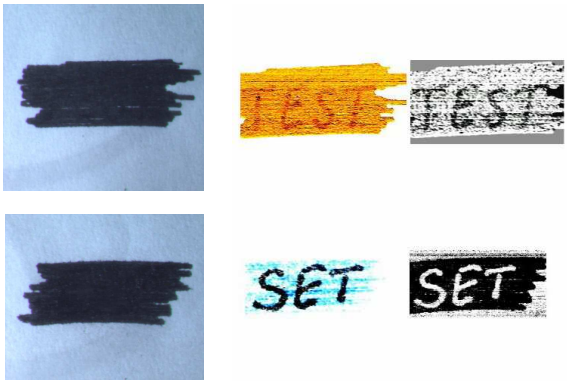
Line sequence indications



Detecting alterations by revealing the presence of visually similar but chemically different inks



Detecting alterations by revealing tracing and original writing



Revealing concealed or masked writing

MST-2 Main Specifications

CCD color camera	838*1164 pixels RGB output
Spectral response	350 to 1000nm
Zoom Lens with coaxial lighting, Polarizing, Variable lighting-angle, Diffuse lighting, Magnification range change & Laser height measurement Adapters	
Additional fiberoptic adjustable illuminator	
Magnification at the standard 21" display monitor,	
Optical	x70 to x420
with auxiliary lens x2	x140 to x840
with auxiliary lens x0.4	x20 to x120
Digital magnification x2 with lens x2	x280 to x1680
Spectral analysis bandwidth	selectable from 5 to 650 nm
Minimal examination area	3 μm^2
Spectral measurements dynamic range	120 dB
Measuring distances, angles, radius, areas and heights of features	

Why MST-2 ?

The most important tool of a document examiner is his vision, but obtaining vivid images of minute or obliterated objects is difficult to discern with the naked eye. Special designed lenses, modern optoelectronics and digital technologies allow you to solve your problems with questioned documents now. MST-2 opens a way for the powerful document examination by using precise spectral measurements with high dynamic range of a micro image/specimen and visualizes it using the original Image Enhancement Software.

By using modern image capturing technology and analysis, it is possible to detect very small differences between inks and papers, and to reveal obliterated materials. Many traditional methods of forensic analysis existing now, rely on "eye-balling" of an image/specimen visualized at 256 individual levels of grayscale optical density. An examiner eye is capable of, on the average, distinguishing 20-30 individual grayscale density levels only. MST-2 incredibly enhances your analysis work by providing you with the tool, which precisely captures optical color density actually existing in an image under examination in a true color format (does not paint a grayscale image!), and then makes them visible to the eye on a PC screen. Comparing to the grayscale, a human eye and brain are capable of distinguishing 100-400 individual colors. Due to presentation of the examined document in a full color palette, it amplifies the images and makes them more evident to the eye. These features are normally discernible neither by the human eye nor via traditional methods of analysis, and are the best initial approach for forensic investigations, because they are non-destructive methods and based on really measured parameters of the examined document. MST-2 helps to maximize an accuracy and validity of your decisions. Once you see its benefits you cannot do without it!

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