

# MOSES II

## Magneto-optical sensor system II

**MOSES II is a magneto-optical readout system for forensic investigations. It enables a quick and reliable visualization of magnetic tape information. Based on the modular design MOSES II supports the investigation of all types of commercially available tapes.**



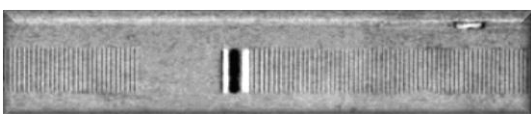
### Magneto-optical forensic visualization

Magnetic fields can be found on all magnetic information carriers such as credit cards and audio- & video tapes. This magnetic information can be easily copied and manipulated.

However, there always remains manipulation traces which can be visualized with MOSES II. These traces for instance occur due to the mismatch or the tilting of the audio head, that produces the traces while writing. Another reason for traces are typical touchdown and lift off marks of the audio head.

### Functional principle

- Generation of homogeneous, linear polarized light (LED & polarizing filter)
- Change of the polarization status and reflection of light in the magneto-optical sensor dependent on the applied local magnetic field
- Visualization of the generated inhomogeneous polarization of the light as a local intensity alteration via a second polarizer
- Recording of the magneto-optical image by using a digital camera on request



Magneto-optical image of a mono track with magnetic recording head imprint area and cleared sector

### Technical Features

- Direct visualization of magnetic information
- Monochromatic LED light source
- Highly sensitive magneto-optical sensor (at least 17 x 8 mm)
- Manually adjustable analyzer
- High resolution Color CCD camera with zoom lens
- Software for camera control and image processing
- Audio output & speaker
- Modules for compact- & micro-cassettes and for video tapes