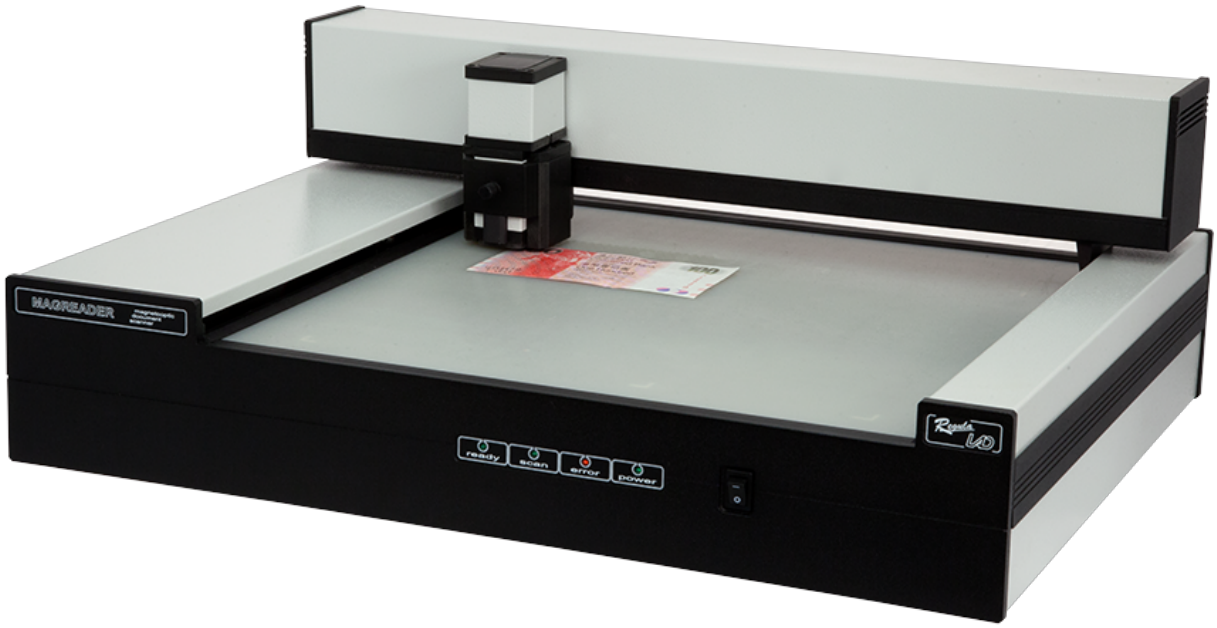
Two-coordinate magneto-optical scanner Regula 7701M



The magneto-optical scanner is intended for advanced examination of banknotes, securities and documents with magnetic security features.

Regula 7701M is constructed as a single unit for desktop use in aluminum metal body. It is used with a PC and fully controlled with the help of CADR software (supplied with a unit). The device is reliable, convenient and easy-to-use.

The scanner object stage has a perforated area for document pneumatic pressing. Document surface scanning is carried out with the help of a magnetic head which is equipped with a magnetization system.

Functionality

- Construction and comparative analysis of magnetic patterns of examined documents
- Comparative examination of printing tools and materials (detection of magnetic properties of dyes in examined objects)
- Examination of magnetic security features (magnetic ink, fibers, tapes, etc.)
- Reading invisible magnetic strokes and codes
- Examination of damaged documents – reading blurred and crossed out texts printed with magnetic ink
- **Assessment of magnetic parameters for document security elements: distribution of magnetic induction, magnetic flux modulus**

Special features

- Effective magnetization system and high sensitivity of the visualizer which allows examining magnetic materials with a low level of leakage flux
- Detachable magnetization system enables to differentiate security features made of magnetically soft and magnetically hard materials
- Specialized software enables to measure quickly and accurately images of examined documents and compare them with the samples

Regula 7701M

In addition, Regula 7701M provides a possibility to carry out a comparative assessment of magnetic properties of document protection elements. The **Magnetic Measurements** function in Regula 7701M enables not only to obtain a histogram of the normal component of magnetic induction Bn (in Tesla) for a frame and to calculate the module of the magnetic flux Φn (in Weber) in this frame area, but also to compare a distance (d) between the histogram of an examined document and that of a sample. Comparing obtained parameters (Bn, Φn, d) of the examined document and the sample enables to draw a conclusion on the authenticity of the document and the magnetic image wear or damage degree.

Application

- Border control/immigration services
- Customs authorities
- Forensic departments
- Court expertise
- Law-enforcement agencies
- Financial institutions
- Other agencies and organizations authorized to check documents and banknotes

Delivery Set

- CADR software and drivers for the device control
- Optionally:
    - PC
    - Demagnetizer **Regula 7751**

Technical specifications	
Examined document size (length×width), mm, max	335×297
Field of view of the optical input system, maximum size, mm	15×18,5
Size of camera array, pixels	CMOS 1280×1024
Spatial resolution, μм, min	14
Scan time for an A4 document, min, max	5,5
Connection interface	USB 2.0
OS	Windows 10
Dimensions (length×width×height), mm, max	586×470×230
Weight of the scanner with the power supply unit, kg	15,5
Power consumption, V, max	12

Optional Accessories:

Demagnetizer Regula 7751

Functionality

- Improving the accuracy of magnetic parameter measurements obtained with the Magneto-optical scanner-analyzer Regula 7701; 7701M
- Demagnetization of magnetic protection elements and their magnetization to a state of magnetic saturation

Researched object transportation speed, cm/s — 3,5...4,5

Maximum document size, mm — 200×95

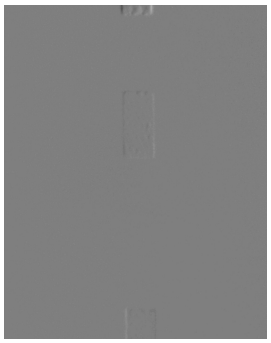
Overall dimensions (length×width×height), mm — 310×140×127

Weight, kg — 2,3

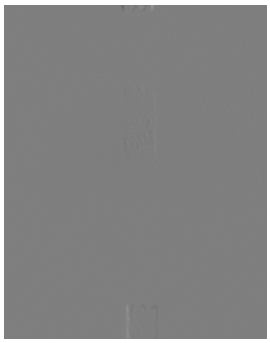
Power supply, V — 24

Power consumption, A — 0,75

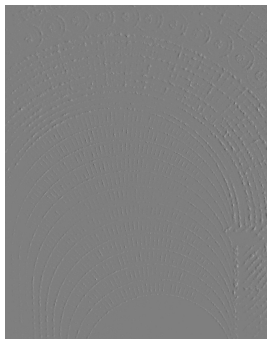
10 Euro 2014, magnetic card



10 Euro 2014, fragment of a magnetized image



10 Euro 2014, fragment of a demagnetized image



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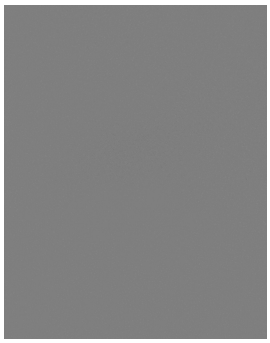

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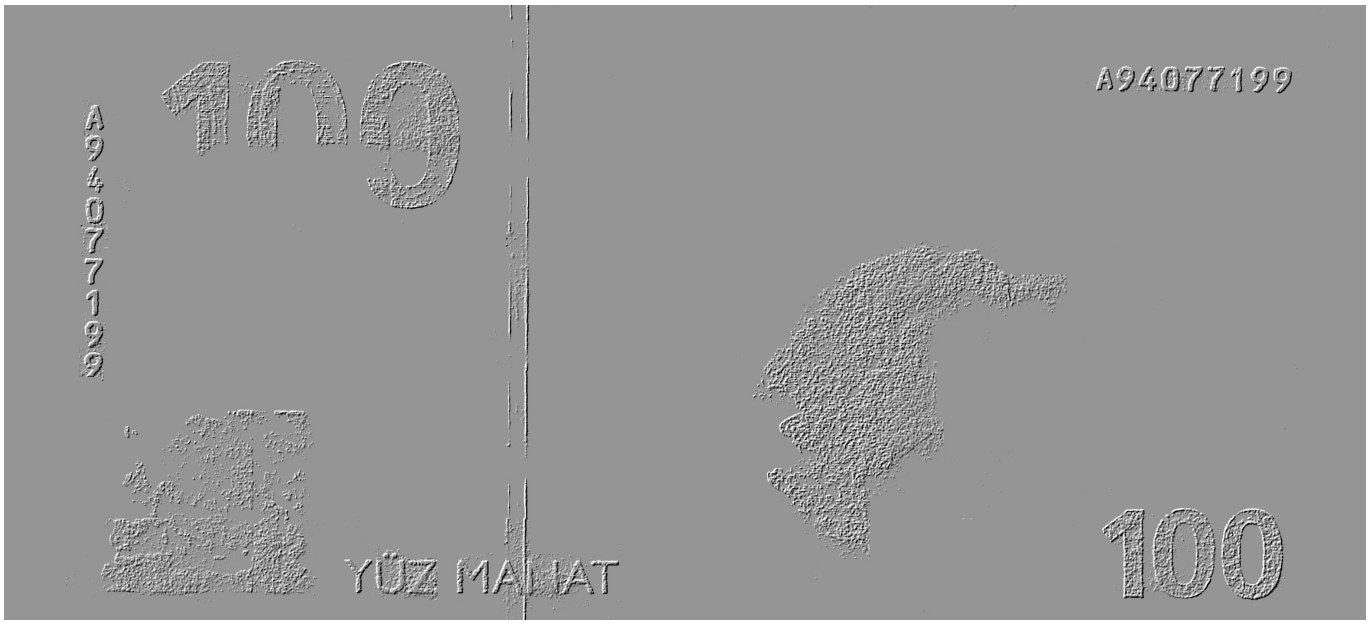
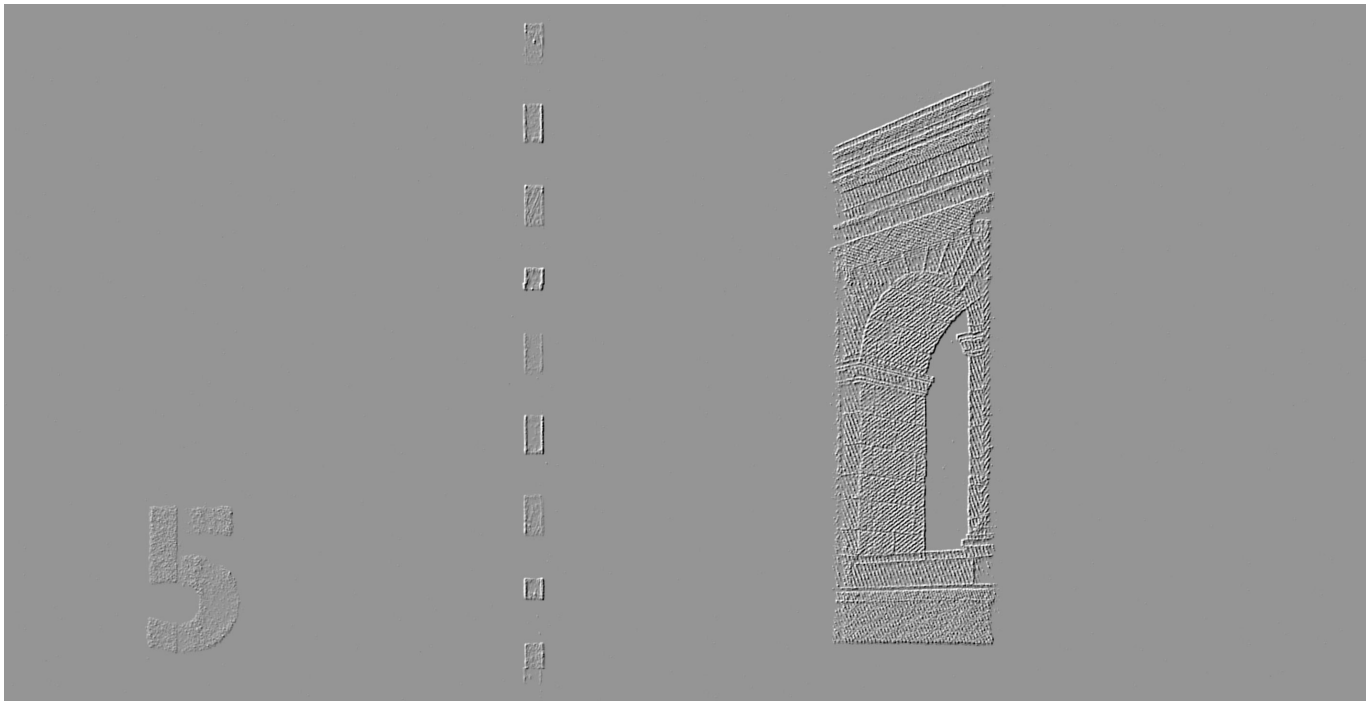
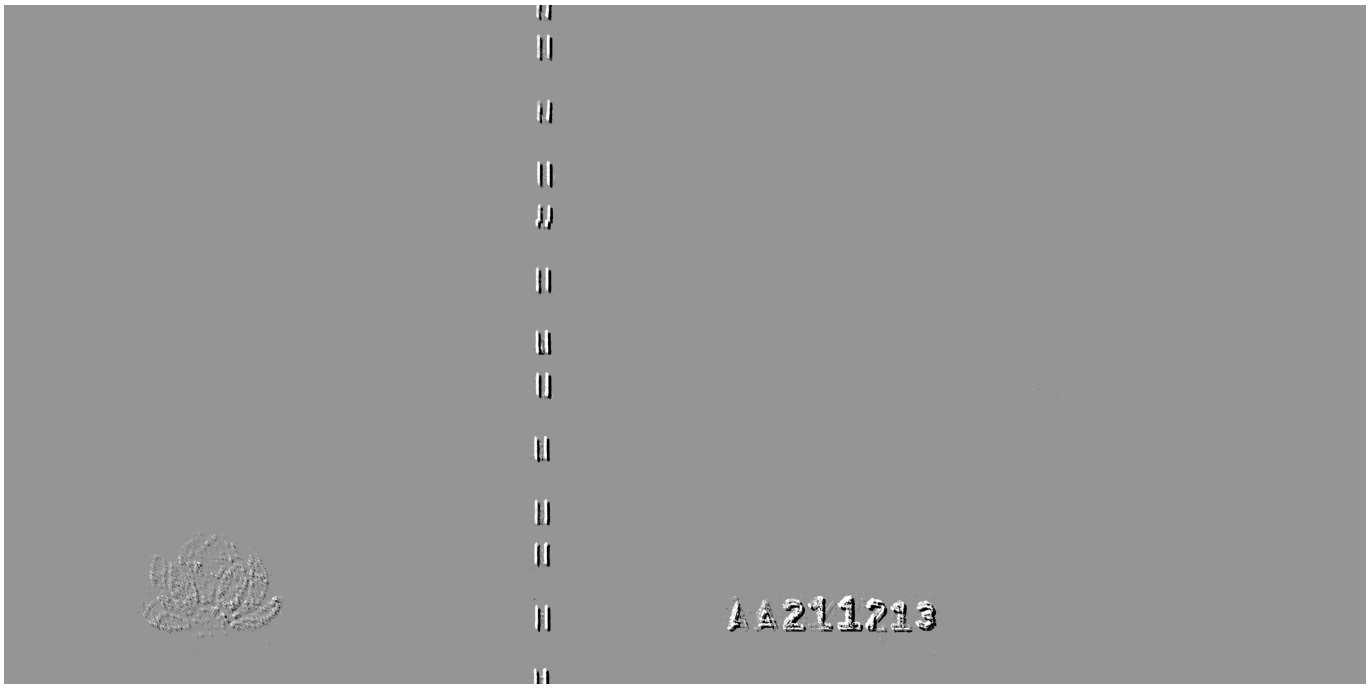


Azerbaijan - manat - 100-2005

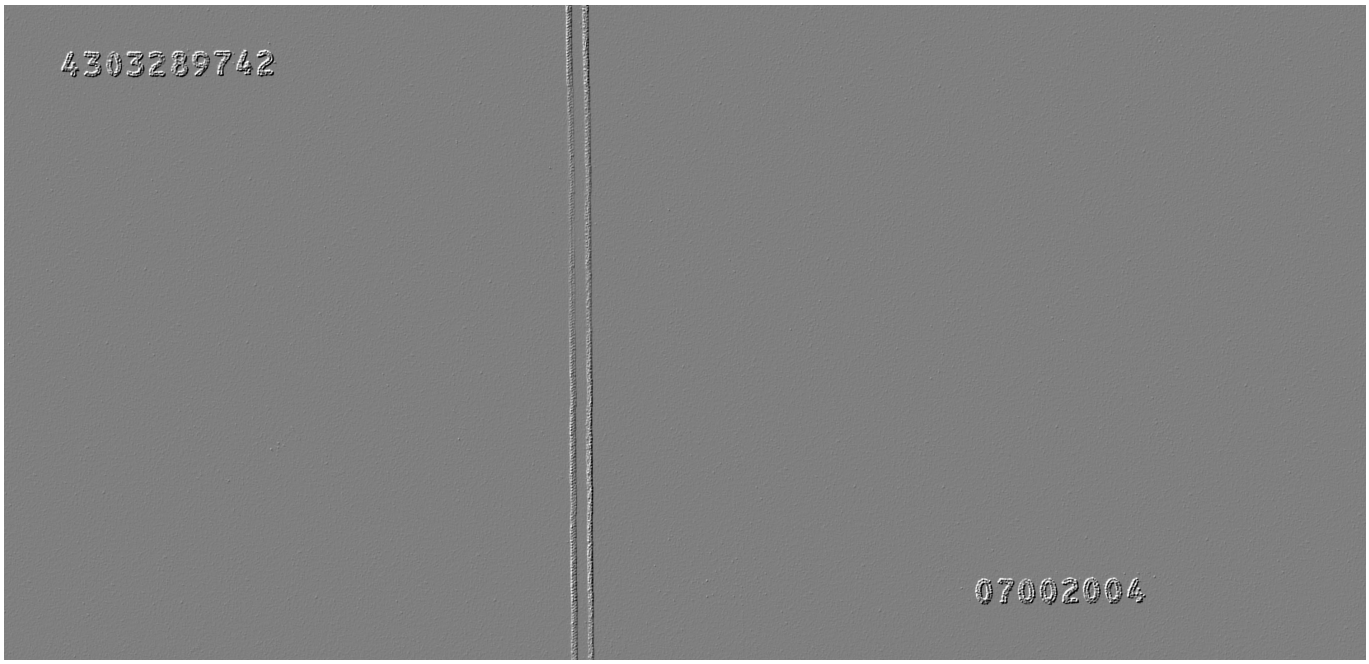


Euro- 5-2013

Fiji - 10-2012

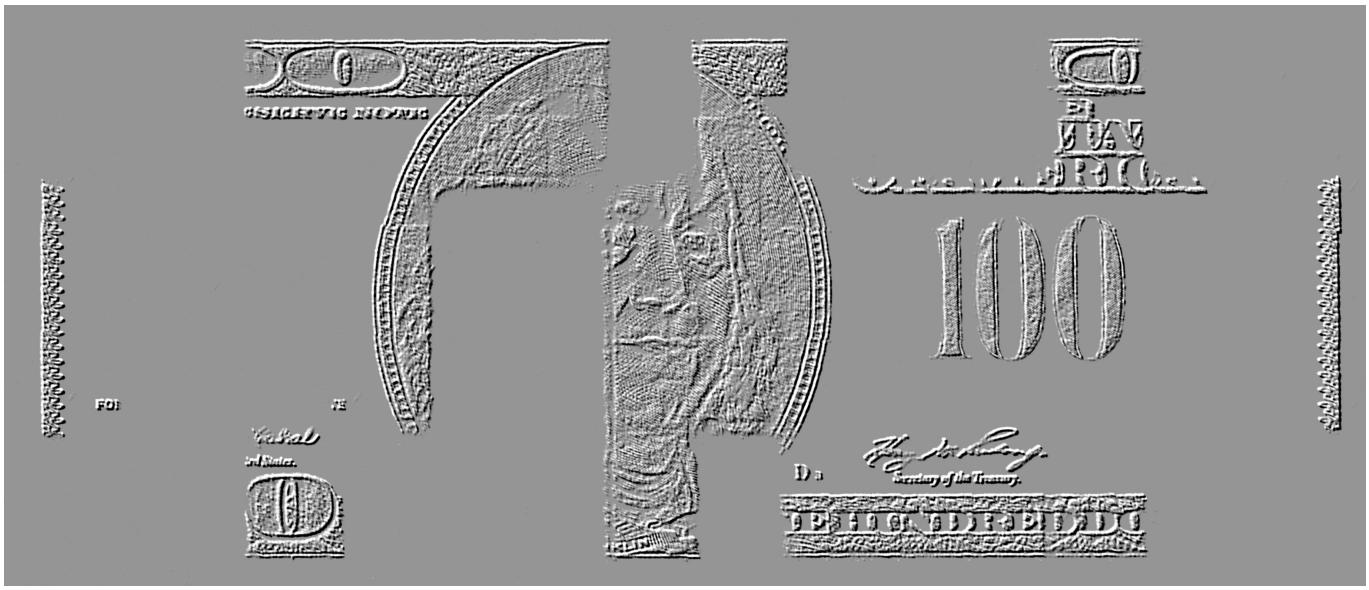


MOP-1000-2008

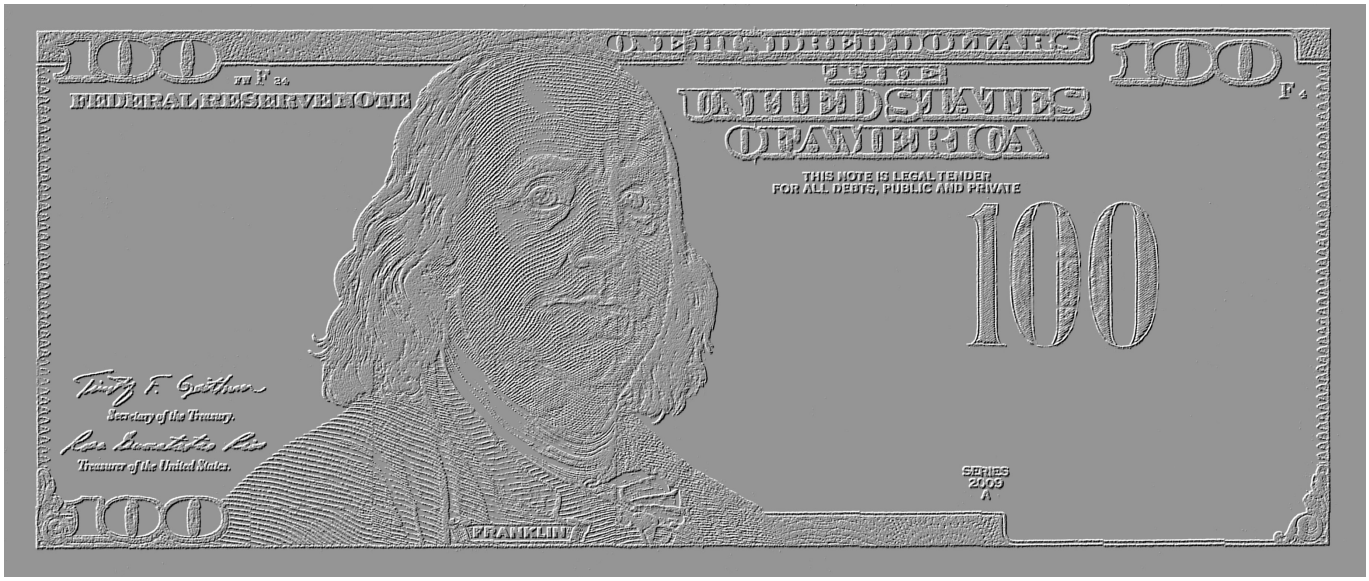


Norwegian krone-1000-2004

Peru-Sol-200-2009



Dollar-100-2006



Dollar-100-2009