



Certified Quality  
Management System

# DEMAGNETIZER REGULA 7751 (DMR-02)

## **User's Guide**



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## **1 FUNCTION**

Demagnetizer Regula 7751 (DMR-02) (hereinafter referred to as «the demagnetizer» or «the device») is intended for:

- 1) demagnetizing document security elements made of materials with magnetic properties;
- 2) magnetizing document security elements, made of materials with magnetic properties, to the level of magnetic saturation.

The demagnetizer allows removing random magnetization of document security elements and examining different documents under equal conditions: at zero magnetization or at saturation magnetization.

## **2 APPLICATION**

The demagnetizer can be used in all kinds of security document examinations in criminalistics, production of securities and customs procedures.

## **3 DELIVERY SET**

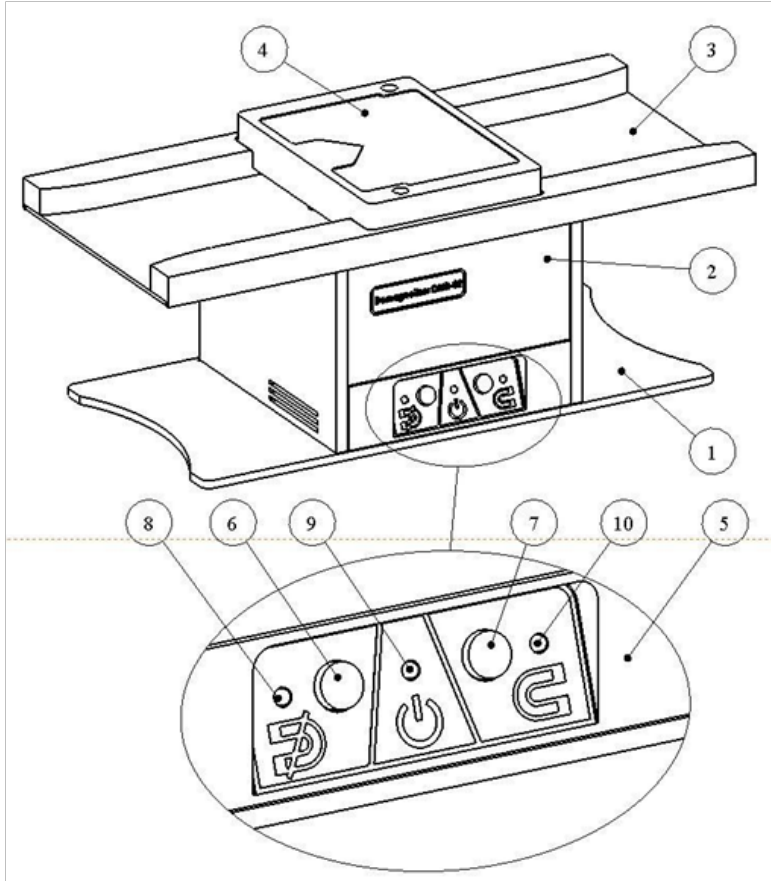
The delivery set includes:




- demagnetizer Regula 7751 (DMR-02);
- power supply unit;
- user's guide.

## 4 CONFIGURATION AND OPERATION

The demagnetizer consists of a stand **1**, main unit of the device **2**, object stage **3** and cover **4** (Figure 1).

Figure 1

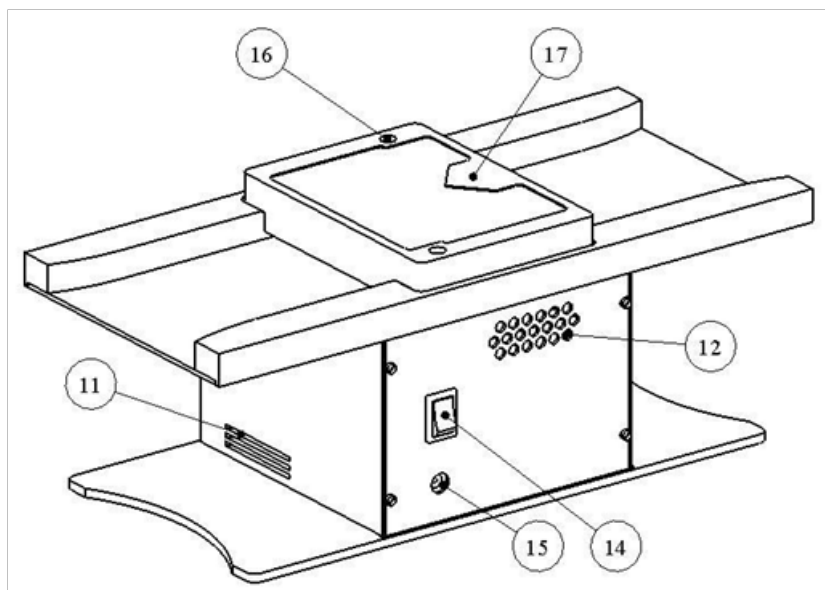


In the bottom part of the main unit there is a control panel **5** which contains two buttons **6**, **7** and three LED indicators **8**, **9**, **10**. The button **6** and indicator **8** are marked with the icon . The button **7** and indicator **10** are marked with the icon . The middle indicator **9** has the icon .

The air inlets **11** on the side panels of the device as well as air inlets **12** on the back panel provide ventilation inside the main unit (Figure 2).

The back panel contains a power button **14** and a socket **15** for power supply connection.

**Figure 2**



The cover **4** on the top of the demagnetizer shields the device working area: the rollers of the transporting mechanism and the inductor coil generating high-frequency magnetic field. The cover is mounted to the object stage with two screws **16**.

On the top of the cover there is an arrow mark **17** indicating the direction in which the processed document moves.





## 5 INTENDED USE

### 5.1 Preparation for use

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Switch the power button **14** to the OFF position and connect the power cable to the socket **15** (see Figure 2).

Plug the power cable into the mains socket.

Switch on the power button **14**. Two LED indicators should light up on the device control panel:  and  or  and . It means that the demagnetizer operates properly and is ready for use.



(The combination of LEDs that will light up depends on the operating mode used before the device was switched off).

### 5.2 Device use

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#### **ATTENTION!**

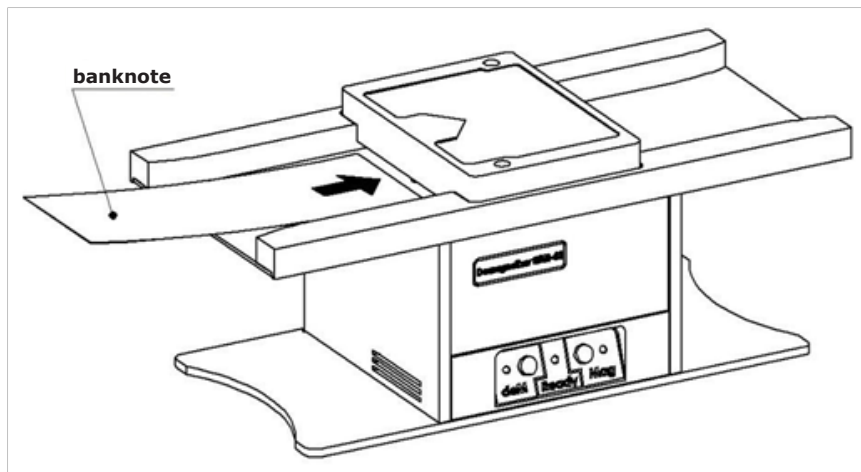
CREASED DOCUMENTS MAY JAM IN THE INDUCTOR COIL DURING THE MAGNETIZATION/DEMAGNETIZATION PROCEDURE. THEREFORE, ONLY DOCUMENTS WITH A FLAT SURFACE ARE TO BE USED. SMOOTH OUT CREASED DOCUMENTS OR DOCUMENTS WITH FOLDS AND WRINKLES BEFORE USING THE DEVICE.

Select the required operating mode of the device: document magnetization or demagnetization. The button  switches on the magnetization mode and the button  activates the demagnetization mode. Place the examined document (banknote) on the left side of the object stage and slightly push it under the cover (Figure 3). The optical sensor will detect the document edge and start up the transporting mechanism which will grip the document, pull it through the inductor and eject it to the right side of the object stage.

Depending on the selected operating mode, the processed document will be either magnetized or demagnetized.

After the document has passed through the device working area and appeared from under the right cover edge, the transporting mechanism will stop and the inductor will switch off.

**Figure 3**



### **5.3 Fixing paper jams**

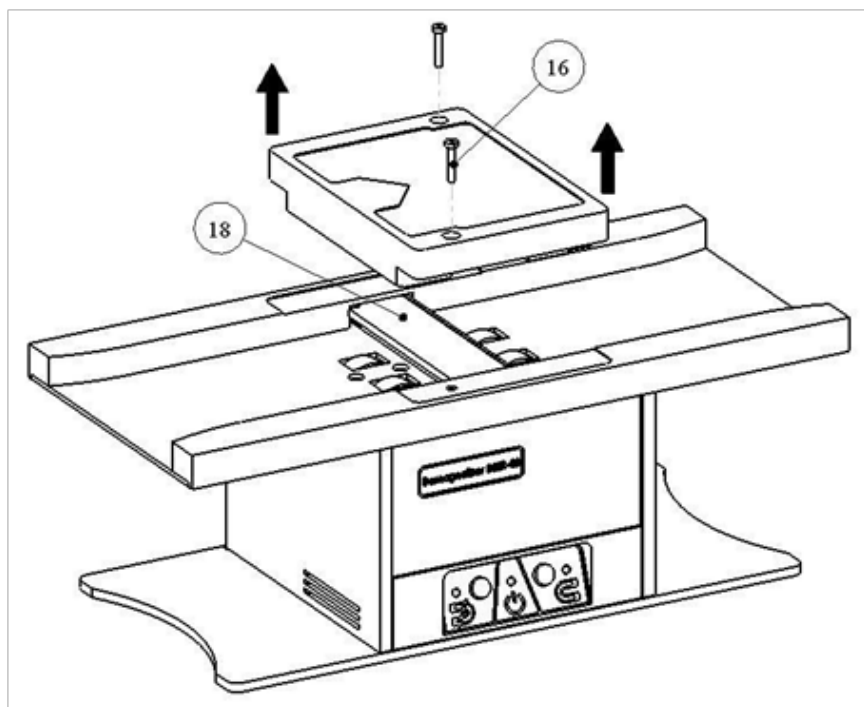
Document transporting is supposed to stop automatically to prevent a possible paper jam in the working area. Nevertheless, the thin slot of the inductor coil through which the document passes may be the reason for a document jam during the magnetization/demagnetization procedure.

In case of a paper jam, the transporting mechanism of the device will stop in 2–3 sec in order to prevent serious document damage. After this, carefully pull the document in the direction opposite to transporting in order to take it out of the mechanism.

If the document cannot be taken out this way, remove the device cover. To do this, switch off the device. Remove the two screws in the upper part of the cover (Figure 4) and take the cover off. Pull the jammed document out of the inductor slot. Then place the cover back on the unit.



Figure 4



## 5.4 Operation completion

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Switch off the power button.

The device memory stores the operating mode (magnetization or demagnetization) which was used before the power was switched off. Thus, when the device is switched on again, the last mode used will be activated.

## 6 TECHNICAL SPECIFICATIONS

- Power supply unit — AC/DC adapter; input AC 100...240 V, 50 Hz; output DC 24 V, 0,75 A
- Maximum document width — 95 mm
- Maximum document length — 200 mm
- Document transportation speed — 3.5...4.5 cm/s
- Dimensions (length×width×height) — 310×127×140 mm
- Weight (without the power supply unit) — 2.3 kg

## 7 CLIMATIC CONDITIONS OF STORAGE AND TRANSPORTATION

- Air temperature: +5 °C...+40 °C
- Relative air humidity: up to 80 % at the temperature of +15 °C
- Atmospheric pressure: 100±4 kPa (750±30 mm Hg)
- Maximum number of packages to be stacked 5 pcs.

The device contains magnetized material packed in accordance with the requirements of ICAO Doc 9284 AN/905. The device is allowed for transportation by passenger aircraft.

## 8 MANUFACTURER'S WARRANTY

The warranty period of the demagnetizer makes **24 months** from the date of sale provided that all terms of operation, storage and transportation mentioned in the User's Guide are observed. Do not remove manufacturer's seals from the device during the warranty period.

Storage period makes **24 months** from the date of manufacturing.

Mean lifetime makes **5 years**.

## 9 ACCEPTANCE CERTIFICATE

(to be completed by the manufacturer)

Demagnetizer Regula 7751 (DMR-02) № \_\_\_\_\_  
(serial number)

Responsible for acceptance

\_\_\_\_\_  
(signature) (first and last name)

\_\_\_\_\_  
(year, month, date)

Seal

Address for mailing claims with regard to the quality of the device:

29 Kozlova Lane, Minsk 220037, Republic of Belarus

Tel. +375 17 224 66 44, Fax: +375 17 318 95 73

E-mail: support@regulaforensics.com

Web: www.regulaforensics.com

## 10 SALE CERTIFICATE

(to be completed by the seller)

Demagnetizer Regula 7751 (DMR-02) № \_\_\_\_\_ is sold to:  
(serial number)

Seal

Seller's name \_\_\_\_\_

Date of sale \_\_\_\_\_



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