ESDA a new instrument for the detection of indented impressions in documents

- More sensitive than oblique lighting
- Proved on casework material
- Record transparencies without photography
- Fast and simple to operate
- No interference with other forensic tests
- Handles documents up to A4 size

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ESDA is essentially a manual system allowing the document examiner complete flexibility to deal with the wide variations in materials encountered operationally.

The following description of the operations involved in a routine document examination gives an indication of the speed and simplicity of the process.

1. The document placed face upwards on the vacuum bed of the instrument is covered with a sheet of the thin transparent plastic film. The vacuum pump is switched on, drawing the film down tightly onto the document to produce a smooth surface essential in minimising background noise.

2. The corona discharge unit is passed over the film two or three times to charge the surface and form latent images of the indentations present.

3. Development of a visible image is achieved by placing the clear plastic hood over the document and turning the powder cloud on for a few seconds. This is repeated until a satisfactory image is obtained.

4. If, after inspection, the results are required for record a sheet of the protective adhesive film can be laid over the image to produce a permanent transparency. This is peeled away from the document which is recovered completely undamaged.

Provision is also made for using cascade development as an alternative to the powder cloud. The vacuum bed is tilted and cascade developer (fine beads coated with powder) poured over the surface of the plastic film. A collection tray on the side of the equipment recovers the beads for further use. Although similar results are obtained with both development processes, occasionally greater contrast can be produced with the cascade system. Both methods have the advantage of giving a stable lifesize transparency suitable for immediate examination or photography.

**Specification:**

- **Height with hood:** 350 mm
- **Overall depth:** 600 mm
- **Width:** 300 mm
- **Weight:** 22 kg
- **Input:** 110/240V 50/60Hz

ESDA is supplied complete with a 3 kg reel of imaging film (sufficient for at least 3,000 documents), 500 g of electrostatic toner, 500 g of cascade developer beads and 250 sheets of self-adhesive film for image fixing.