

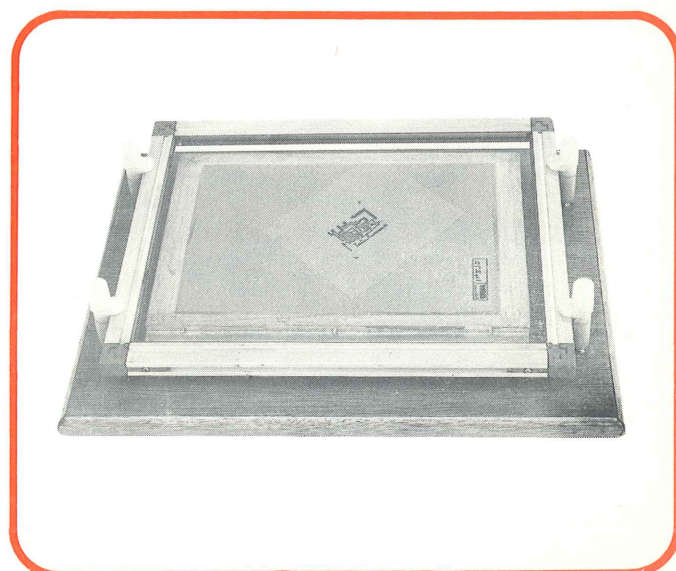
Screen exposure unit and contact frame.

This compact screen exposure unit now enables users of DEK 65, 240 and 1200 Printers to control their own photostencil production, which can be a great advantage when handling rush jobs or repeat orders. With DEK sensitized screens the printer operator can make a complete photostencil from a photographic positive at very short notice, and the result will be of the same high quality as photostencils supplied by DEK.

The cabinet is robustly constructed in sheet steel and finished in two-tone stove enamel. The interior is sprayed matt black to prevent reflected light from undercutting fine lines during exposure.

The electrical exposure unit comprises a 125 watt mercury vapour lamp complete with ballast choke and capacitor: this gives a suitable source of ultra-violet actinic light for stencil exposure. Also provided is an electric timer with adjustable delay and push button repeat. A buzzer signal indicates when the exposure is complete, but the lamp remains illuminated so that another screen can be exposed without delay.

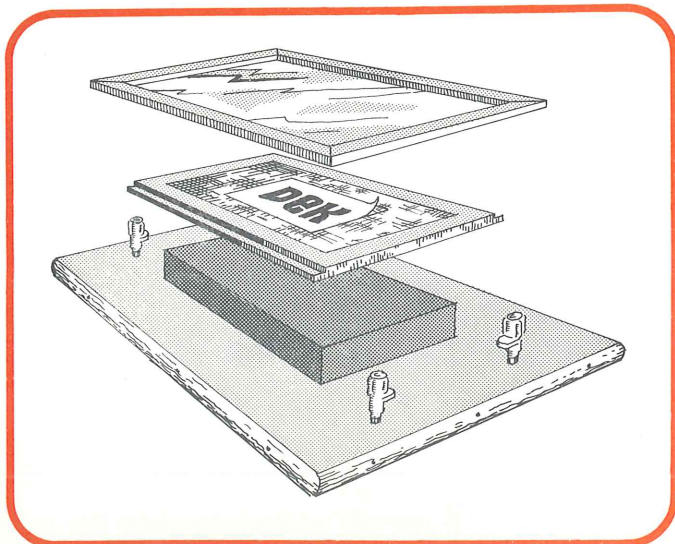
Available separately is a glass-fronted contact frame for DEK standard screens (255 x 185 mm). By using several contact frames an operator can set up, expose and develop sensitized screens at a high rate.



Photostencil production.

Follow these instructions carefully for optimum results when using DEK sensitized screens and the 107 Screen Exposure Unit:

- 1 Switch on mercury vapour lamp to allow five minute warm-up period. Select correct exposure time on minute timer. Optimum exposure time for white nylon mesh with Type 4 emulsion is 12 minutes. For thicker emulsion coating (Types 6 and 10), exposure times should be increased slightly. Exposure time should also be increased about 50% for red polyester mesh and about 30% for stainless steel mesh.
- 2 Take the photographic positive and examine over a light box to ensure the image is free from negative and positive errors. If retouch is required, use photographic opaque.
- 3 In subdued daylight or by yellow electric light (a complete dark-room is not required), take the contact frame and place a sensitized screen over the black-faced sponge pad.
- 4 Position the photographic positive on the face of the screen, emulsion side (less glossy side) downward. Place the glass cover over the top, ensuring that the positive is not moved accidentally.
5. Depress the glass cover and lock it by turning the four clips. This ensures intimate contact between screen and positive.
6. Place the contact frame centrally inside the screen exposure unit. (The top of the contact frame will be 300 mm (12 inches) from the light source.) At the same time, switch on the timer (the buzzer should sound) and press the central button to start the timed cycle.
- 7 At the end of the set period (usually 12 minutes) the buzzer will sound. The lamp remains illuminated so the contact frame must be removed immediately to avoid over-exposure. (If the lamp is switched off, it cannot be restarted until the mercury vapour has condensed.)
- 8 In subdued light, unload the screen from the contact frame and immerse in warm water for 2 minutes. The water temperature should be about 40°C (104°F) or less.
- 9 Develop the emulsion by splashing or spraying warm water vigorously on both sides of the screen: this should give a clearly defined image. Give a final wash in clean cold water.
- 10 Place screen in front of warm air fan to dry for about 10 minutes. Do not overheat: temperature should be 30°–50°C (85°–120°F).
- 11 Examine image for pinholes and retouch where necessary with DEK solution or screen filler.
- 12 Before the screen is used for printing, the coating should be hardened in strong sunlight or under artificial light. The screen exposure unit is also suitable for this purpose.



Specifications

Screen Exposure Unit

Height	700 mm
Width	460 mm
Depth	460 mm
Nett weight	25 kg
Shipping weight	36 kg
Mains supply	240 volts 50Hz
Consumption	0.6 amp
Dry battery	4.5 volts
Lamp life	1000 hours (maximum)

DEK supporting services

DEK offer a comprehensive service covering demonstrations, installation of machines, instruction to operators, manufacture of special fixtures (also advisory service on design), servicing and repair of machines.

DEK manufacture and supply a very wide range of screens for every printing requirement, and will always give advice and assistance on any matter concerning screen printing techniques and materials, including suitable printing mediums.

Agent

DEK PRECISION PRINTING SYSTEMS

DEK Printing Machines Limited
1 Euston Centre
London NW1 3JG
England

Telephone: 01-387 0215
Telex: 261445
Cables: Dekprint London

Ordering information

107.100 DEK 107 Screen Exposure Unit
107.200 DEK Contact Frame