



Durst

Laborator 1840

The supremely versatile enlarger
-from smallest films to giant enlargements

Add to the Laborator 1840 a CLS 1840 colour head (with 1000 watt lamp), a roll paper easel and the Durst PCM 1001 - and you truly have the most efficient and most versatile darkroom unit. For with this combination you handle every type of order, from the smallest standard print to professional giant enlargements and strip prints. The manual tilt movements of the enlarger head, lens standard and baseboard allow easy correction of converging verticals or deliberate distortion effects.

CLS 1840

Colour head

Applications: From reductions to poster prints, to giant enlargements, by simply swinging the enlarger head for horizontal projection. Tightly cropped partial enlargements, transparency duplication, combination printing in register etc.

Short exposures even at high magnifications with the 1000 watt tungsten-halogen lamp and interchangeable double mixing boxes matched to the film size in use - 25x25, 20x25, 13x18, 10x12.5 and 6x9 cm (10x10, 8x10, 5x7, 4x5 and 2 1/4x3 1/4 in.), also 24x36 mm - for most efficient light use.

Special strip mixing boxes greatly reduce

Even illumination with format-matched mixing boxes.

High filter densities Yellow, magenta and cyan dichroic filters with settings up to 130 densitometric values plus supplementary 70 Y and 30 M filters cope easily with difficult originals.

Preferred optimum exposure times and apertures at low magnifications with stepless density diaphragm (range 0 to 60, or 2 f-stops).

Easy focusing with white-light lever to swing filters and density diaphragm out of the light path.

exposure times for strip enlargements by concentrating the light on the film strip area being projected. This can halve the exposure and achieves more even illumination with better colour mixing. Specially suitable for horizontal projection (see technical data).

CLS 2000

Colour head

Applications Enlargements, reductions, horizontal projection, transparency duplication, combination printing etc.

High light output The 2000 watt tungsten-halogen lamp with separate diathermic reflector and the double format-matched mixing boxes yield maximum light output with optimum colour mixing. This ensures very short exposure times - a special boon with horizontal projection for giant enlargements.

The voltage stabilizer compensates voltage fluctuations from +10% to -15%

Optimum colour temperature even with short exposure times. The voltage stabilizer controls a shutter that only opens when the preheated tungsten-halogen lamp has reached its correct colour temperature. After the exposure the shutter automatically closes and the lamp returns to preheated standby mode.

High filter values up to 130 densitometric values with stepless dichroic filter settings. Supplementary 20 M and 45 Y filters are built in for negatives needing extreme correction.

Density diaphragm avoids excessively short exposure times at low magnifications and compensates reciprocity failure. The setting range of 0 to 60 covers 2 f-stops.

Efficient cooling system Two fans - one for the lamp area including the heat filter and dichroic filters, the other for the film carrier, mixing boxes and diffuser - prevent harmful heating of films even with continuous operation. The fans keep running until the lamphouse has cooled to ambient temperature.

Basic enlarger

Features

Rigid construction for maximum stability. The solid column design maintains precise alignment of the

three principal planes.

Horizontal projection. It's rigid construction makes the Laborator 1840 specially suitable for horizontal projection. For easy movement in such a setup we recommend installing the enlarger on rails.

Full distortion control. The independent tilt facility of the three principal planes (baseboard, lens plane and enlarger head with film plane) corrects converging verticals or provides deliberate distortion. Scales simplify repeat settings.

Motorized enlarger head and lens movement. A central control panel controls these functions. It also stores exposure times and triggers the exposure via the digital timer.

Roll paper easel operation. The baseboard carrying arm is easily removed, for using a roll paper easel.

Accessories

1) ROLLFILMNEG 1840

Consists of an adapter with adapter mixing box and BIMANEG negative carrier (rotates through 90 degrees, normally supplied with two glass plates). Particularly suitable for rapid enlargements from films up to 6 x 9 cm, especially with roll paper easels.

BINEMA metal masks for film sizes from 24 x 36 mm to 6 x 9 cm (ROLLFILMNEG 1840 accessories).

2) BIMABOX 35 N, 69 N

Mixing boxes for film sizes from 24 x 36 mm to 6 x 9 cm (ROLLFILMNEG 1840 accessories).

HOMASKSET

Format masks for film sizes from 24 x 36 mm up to 20 x 25 cm with the LARANEG negative carrier (mounted below lower glass, permit use of two negative carrier glasses).

Two laterally adjustable masking plates mask down the film to the required strip. The basic NEGATEIL 1800 N includes a register pin bar for the Durst LORVALO system. The Durst MIVALO register system (MIVADAP 205) and the American Kodak system (KODAREG 165 V) are available separately.

5) PCM 1001

-Serves as a colormeter to establish filter settings and exposure times, allowing for reciprocity failure effects.

-Also as Photometer for slide duplication.

-And as VCNA translator

-Permits spot or full-area readings.

-Automatically compensates for reciprocity failure.

Please ask for the PCM 1001 booklet.

6) LARABOX 100 N, 138, 450, 69, 35 for film sizes from 24 x 36 mm to 20 x 25 cm

TRINOMASK 35 N, 66 N, 67 N, 69 N

Format masks (24 x 36 mm up to 13 x 18 cm) fitted with guide pins on springs. Permit the use of a glass or anti-Newton glass plate in place of the upper format mask for occasions where absolute film flatness is vital.

LARATRINO

Pair of reducing adapters for faster operation with the LARANEG carrier with TRINOMASK format masks.

3) LARANEG

Negative carrier equipped with two register pin bars (Durst LORVALO and Kodak Register systems).

4) NEGATEIL 1800 N

Special negative carrier for strip exposures with horizontal projection, for film sizes up to 20 x 25 cm. Lateral knobs can shift the inner film holder out of the optical axis by up to 120 mm to the left or right. That allows attachment of the enlarging paper in the same spot on the easel every time.

7) LARABOX 256, 186, 126 for strip exposures with film sizes from 10 x 12.5 to 20 x 25 cm (4 x 5 to 8 x 10 in.).

8) NEGAROLL 205 for rapid operation with aerial films and film rolls up to 240 mm (9 1/2 in.) wide and 60 m or 200 ft long.

9) MIVALO micro precision register system for register operations with the standard LARANEG and the NEGATEIL 1800 N negative carriers
- VAPLA lens board for 300 and 360 mm lenses.
- TRIPLA lens turret for three lenses from 100 to 240 mm.
- UNIPLA lens board for lenses from 100 to 240 mm.

10) DESKMES 1000 remote control unit for enlarger head and lens plate adjustment.

Technical data

Basic enlarger

Overall height with CLS 1840:
approx. 281 cm (111 in.)

Overall height with condenser unit: approx. 270 cm (106 in.)

Optical axis/column distance:
approx. 49.5 cm (19.5 in.)

CLS 1840 colour head

Light source: 120V 1000W tungsten-halogen lamp

AC mains supply:
- stabilised EST 1000 mains transformer
- Nominal voltage 220/240V, 50-

CLS 2000 colour head

Light source: 230V 2000W tungsten-halogen lamp

AC mains supply:
- stabilised EST 2000 mains transformer
- Nominal voltage 220/240V, 50-

Lowest optical axis level with horizontal projection: approx. 130 cm (19.5 in.)

Floor space requirement: approx. 140 x 140 cm (55 x 55 in.)

Baseboard size: 90 x 110 cm (35 x 43 in.)

Usable vacuum table area: 60 x 70 cm (24 x 28 in.)

Supply voltage: 220/240V, 50-60Hz

Power consumption: approx. 500W

Max. loading of power supply unit: approx. 1500W

Net weight (standard outfit): approx. 130 kg (286 lb)

60Hz
- Stabilising range 180-260V
- Output voltage of EST 1000: 120V
+-1%

Power consumption: 1200 watts

Filters: Dichroic, up to 130 densitometric values

Supplementary filters: approx. 70 Y and 30 M, 18 x 18 cm

Density diaphragm: 0 to 60 (= 2 f-stops)

Size: approx. 65 x 44 x 71 cm (25.6 x 17.3 x 28 in.)

Net weight: approx. 33 kg (72 lb)

60Hz
- Stabilising range 180-260V
- Output voltage of EST 2000: 228V
+-1V

Power consumption: 1200 watts

Filters: Dichroic, up to 130 densitometric values

Supplementary filters: approx. 45 Y and 20 M

Density diaphragm 0 to 60 (= 2 f-stops)

Size: approx. 60 x 55 x 65 cm (23.6 x 21.6 x 25.6 in.)

Net weight: approx. 18.55 kg (39 lb)



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