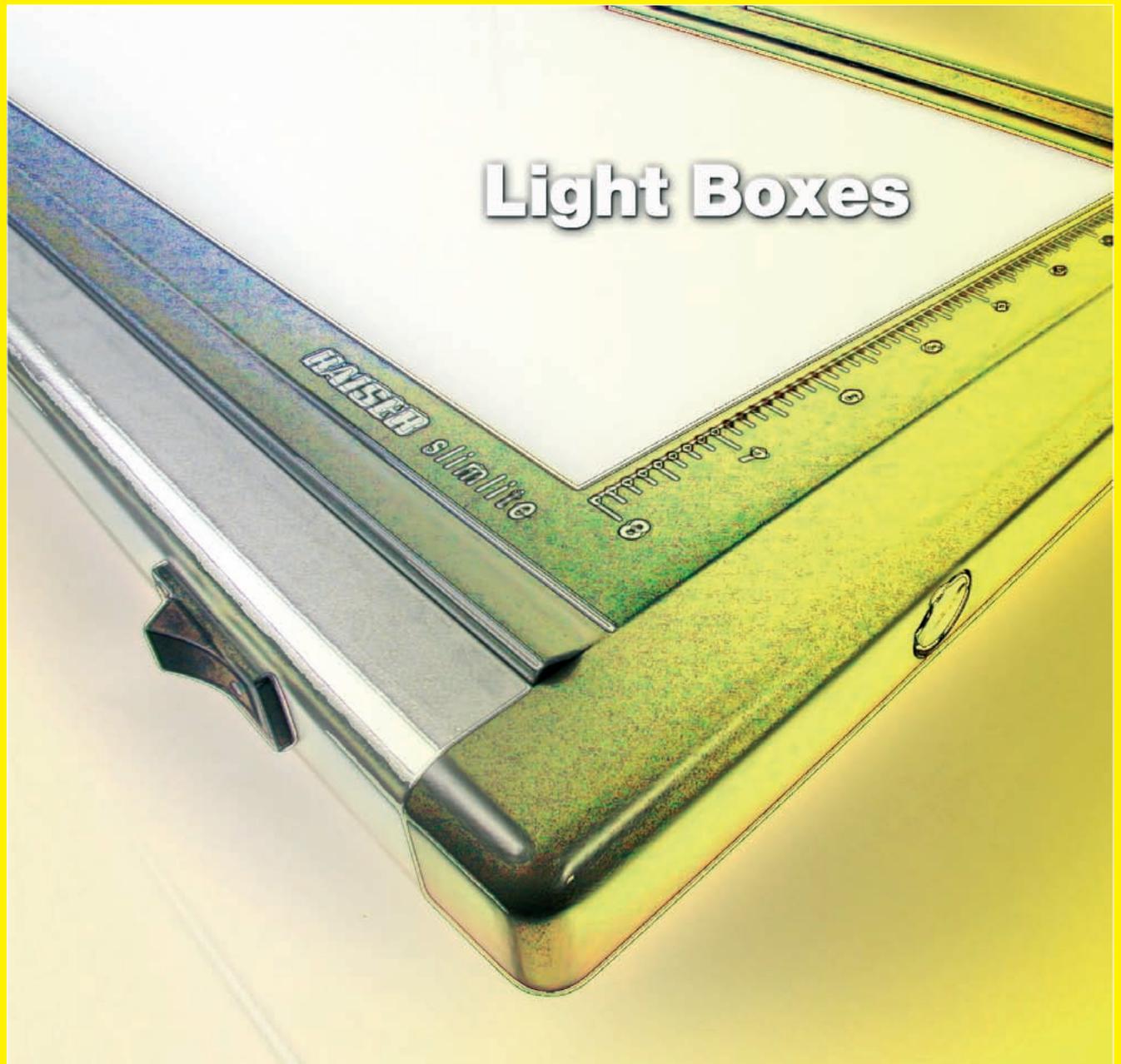


Light Boxes



Luminous Surfaces



Light is the elixir of life in photography. This not only applies to the light you need when shooting a picture, but in addition to the lighting conditions when viewing the results.

Light is needed to illuminate and to transilluminate depending on whether the subject is reflective or transparent.

A light box is the appropriate tool to transilluminate a transparent original. It seems at a first glance that this must be the simplest of all light sources: Take a square box, put some lamps in it, cover it with diffusion - done. Without doubt, this is a light source, but most likely completely inappropriate for a photographic application.

Because there are stringent requirements for „transmitted light sources“. The most important one is evenness: every spot on the luminous surface should have the same brightness, or - to put it in correct technical terms - luminance of the viewing area should be constant, the inevitable edge drop may not exceed a certain critical value. This is equally important for viewing and inspecting slides as for photographic reproduction or duplication of transparent originals. Selected materials for the lit surface, a well-balanced design of interior reflectors and light conduction techniques are used to meet these requirements.

If you have to inspect color qualities of a transparency or if you want to capture a color original, then it is important that the light box has the correct color properties. Fluorescent lamps with day-light-type spectrum, a well-defined color temperature and a high color rendition index are required. Reflectors and diffusion material have to stay „neutral“, they must not effect the color rendition.

If the transilluminated original is not viewed by the human eye but with a camera, we have to add further requirements. For example there must be a minimum luminance in order to reach practical f-numbers or the luminance must be particularly high to capture specific details.

If the viewing „eye“ belongs to a digital camera, then there could be additional requirements to the stability of the light. Very often flicker-free lighting is important, and that is achieved by high-frequency operating systems for the fluorescent lamps. For extremely critical applications a residual ripple suppression might be indispensable.

Even fluorescents generate a certain amount of heat, and if you have to use many lamps in a light box to achieve a high illuminance, it might be necessary to take precautions to reduce the thermal load of the originals - an effective cooling system has to be integrated.

But there are still other needs and requirements, for example battery operation on small and portable light boxes. If these - in addition - are extremely flat, they can easily be stowed away in a bag or a briefcase.

The Kaiser light boxes described on the following pages have different features according to the potential requirements. Now you only have to choose the appropriate size and then you have your luminous surface.





2420-22 „slimlite“ Light Box

A compact and handy, super-flat daylight light box. Uniform illumination as a result of special light conducting and reflecting technology in conjunction with cold-cathode fluorescent tubes. Service life: approx. 10,000 hours. Color temperature approx. 5000 Kelvin ($\pm 5\%$). ON/OFF switch. Protective cover included.

2420: Viewing area: approx. 10 x 12.5 cm (4 x 5 in.)
 Dimensions (WxHxD): approx. 16 x 1.4 x 15 cm (6.3 x 0.6 x 5.9 in.)
 Weight: approx. 260 g (9.2 oz.)
 Battery powered: 6 x 1.5 V AAA-type
 Mains operation: with mains adapter 2419. Supplied without batteries or mains adapter.

2421: Viewing area: approx. 18 x 13 cm (7 x 5 in.)
 Dimensions (WxHxD): approx. 22 x 2.1 x 19 cm (8.7 x 0.8 x 7.5 in.)
 Weight: approx. 515 g (1 lbs. 2.1 oz.)
 Battery powered: 6 x 1.5 V AA-type
 Mains operation: with mains adapter 2419. Supplied without batteries or mains adapter.

2422: Viewing area: approx. 30 x 20 cm (12 x 8 in.)
 Light box with fold-out feet and clamping strip.
 Dimensions (WxHxD): approx. 37 x 2.5 x 28 cm (14.6 x 1 x 11 in.)
 Weight: approx. 1.270 g (2 lbs. 12.7 oz.). Mains operation with separate mains adapter (included).



2419 Mains Adapter

To operate the 2420 and 2421 „slimlite“ light boxes on the mains.

2416-18 „slimlite“ Light Box

Extremely flat daylight light boxes. Even illumination achieved by using a special method of light conduction and reflection. Color temperature approx. 5000 Kelvin. On/Off switch. With clamping bar and fold-out bracket. Can be wall-mounted.

2417: Illuminated area: approx. 46 x 20.5 cm (18.1 x 8.1 in.)

Dimensions (WxHxD): approx. 55 x 3 x 30.5 cm (21.7 x 1.2 x 12 in.)

Lamps: 2 x 13 W

Mains adapter: 24 V, 2 A

2418: Illuminated area: approx. 46 x 30,5 cm (18.1 x 12 in.)

Dimensions (WxHxD): approx. 55 x 3 x 40.5 cm (21.7 x 1.2 x 15.9 in.)

Lamps: 2 x 13 W

Mains adapter: 24 V, 2 A

2416: Illuminated area: approx. 61 x 35.5 cm (24 x 14 in.)

Dimensions (WxHxD): approx. 70.5 x 3 x 45.5 cm (27.8 x 1.2 x 17.9 in.)

Lamps: 2 x 20 W

Mains adapter: 24 V, 2 A



for 2417-18



5400K, 13W

2135



2403-06/2423-26/2433-36 „prolite basic 2“ Light Box

5000 Kelvin color temperature. Uses special fluorescent tubes for high color fidelity. Color rendition index CRI = 90-100.

High-quality acrylic-glass plate of exceptionally uniform transmission over the entire visible spectral range. Robust, all-metal housing with non-slip rubber feet and the possibility to mount the light box on a wall. ON/OFF switch.

Sorting attachment for 30 or 70 mounted 35mm slides (only for light boxes with a viewing area of 30 x 21 cm (11.8 x 8.3 in.) and 50 x 30 cm (19.7 x 11.8 in.)).
2 m (6 ft. 7 in.) power supply cable.

2403-06: Basic versions. Mains frequency operation.

2423-26: as 2403-2406, but with additional integrated high-frequency operating system (operating frequency approx. 40 kHz) for flicker-free start-up and operation.

2433-36: as 2423-2426, but with additional brightness control for continuously variable dimming down to 10% of maximum light output.

2406 is not available in 120 V.



5400K, 8W	2146, 2474
	2136,
5400K, 13W	2476, 2477

Survey: prolite basic 2

Code	Illuminated area	Lamps	Dimensions (cm/inch)	Special features	Replacement lamps (Set of 2 or 4 lamps)
2403	30 x 21 cm 11.8 x 8.3 in	2 x 8 W	33.5 x 6 x 27.5 13.2 x 2.4 x 10.8		2474
2423	30 x 21 cm 11.8 x 8.3 in	2 x 8 W	33.5 x 6 x 27.5 13.2 x 2.4 x 10.8	HF	2474
2433	30 x 21 cm 11.8 x 8.3 in	2 x 8 W	33.5 x 6 x 27.5 13.2 x 2.4 x 10.8	HF, dimmable	2474
2405	50 x 30 cm 19.7 x 11.8 in	2 x 13 W	56 x 6 x 36.5 22 x 2.4 x 14.4		2476
2425	50 x 30 cm 19.7 x 11.8 in	2 x 13 W	56 x 6 x 36.5 22 x 2.4 x 14.4	HF	2476
2435	50 x 30 cm 19.7 x 11.8 in	2 x 13 W	56 x 6 x 36.5 22 x 2.4 x 14.4	HF, dimmable	2476
2406	50 x 60 cm 19.7 x 23.6	4 x 13 W	56 x 6 x 66.5 22 x 2.4 x 26.3		2477
2426	50 x 60 cm 19.7 x 23.6	4 x 13 W	56 x 6 x 66.5 22 x 2.4 x 26.3	HF	2477
2436	50 x 60 cm 19.7 x 23.6	4 x 13 W	56 x 6 x 66.5 22 x 2.4 x 26.3	HF, dimmable	2477



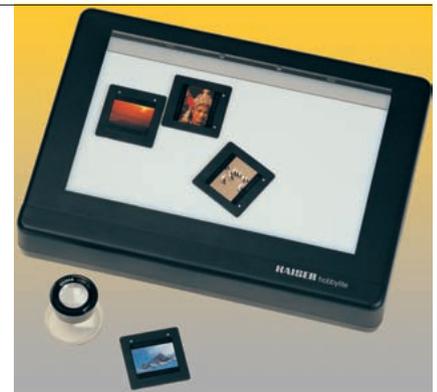
2139 „hobbylite“ Light Box

Daylight light box for battery and mains operation. With fold-out support, clamping strip and facilities for wall mounting. ON/OFF switch. Supplied with 8 x magnifier and 9 V mains adapter.

Viewing area: approx. 25 x 15 cm (9.8 x 5.9")
Illumination: 1 x 8 Watt, 5400 Kelvin
Battery operated: 6 x 1.5 V (C) (not included)
Dimensions (WxHxD): approx. 31 x 6 x 22 cm
(12.2 x 2.4 x 8.7 in.)



2133





2414,
2487
5400K, 55W

2492-93
„prolite scan SC“ Light Box

Professional light box also suitable as backlight source. Color temperature 5000 Kelvin. 4 Dulux fluorescent lamps CRI = 90-100. Very high lighting power: approx. 50.000 lux. High-frequency operation system (approx. 40 kHz). Vibration-free low noise fan cooling permits unlimited continuous operation with minimum heating of the viewing surface. Operating hours counter. Cm and inch scales. Non-slip rubber feet. Can be wall-mounted. On/off switch. Cord 2.5 m (8.2 ft.). Illuminated area: approx. 48 x 44 cm (18.9 x 17.3 in.) Lamps: 4 x 55 W, 5400 K. Dimensions (WxHxD): approx. 63 x 9 x 53.5 cm (24.8 x 3.5 x 21.1 in.)

2492: without dimmer
2493: with dimmer.



2395

2395 DC Voltage Mains Adapter

For residual ripple suppression (<1%) on devices fitted with high-frequency lighting systems and in conjunction with highly sensitive camera systems. Max. load: 400 W. Not available in 120 V.



2136,
2477
5400K, 13W

2441
“prolite 5000 HiQ” Light Box

Back light source for all kinds of transparent originals. Can also be used for industrial applications. High quality acrylic glass plate with uniform transmission over the entire visible spectral range. Interior sheet steel reflector with special high-reflection coating for uniform illumination. Equipped with four special fluorescent lamps. Color temperature 5000 Kelvin, CRI = 90-100.

Luminous density 3500 cd/m², uniformity of 95 % within a 450 x 300 mm (17.7 x 11.8 in.) area (border masking when necessary). High frequency operation system (approx. 40 kHz).

Sheet steel housing with plastic side shields. Non-slip rubber feet. Can be wall-mounted. On/off switch. Mains lead approx. 2 m (6.6 ft.). Illuminated area: 500 x 300 mm (19.7 x 11.8 in.) Lamps: 4 x 13 W, 5400 K. Outside dimensions: 568 x 390 x 67 mm (22.4 x 15.4 x 2.6 in.)