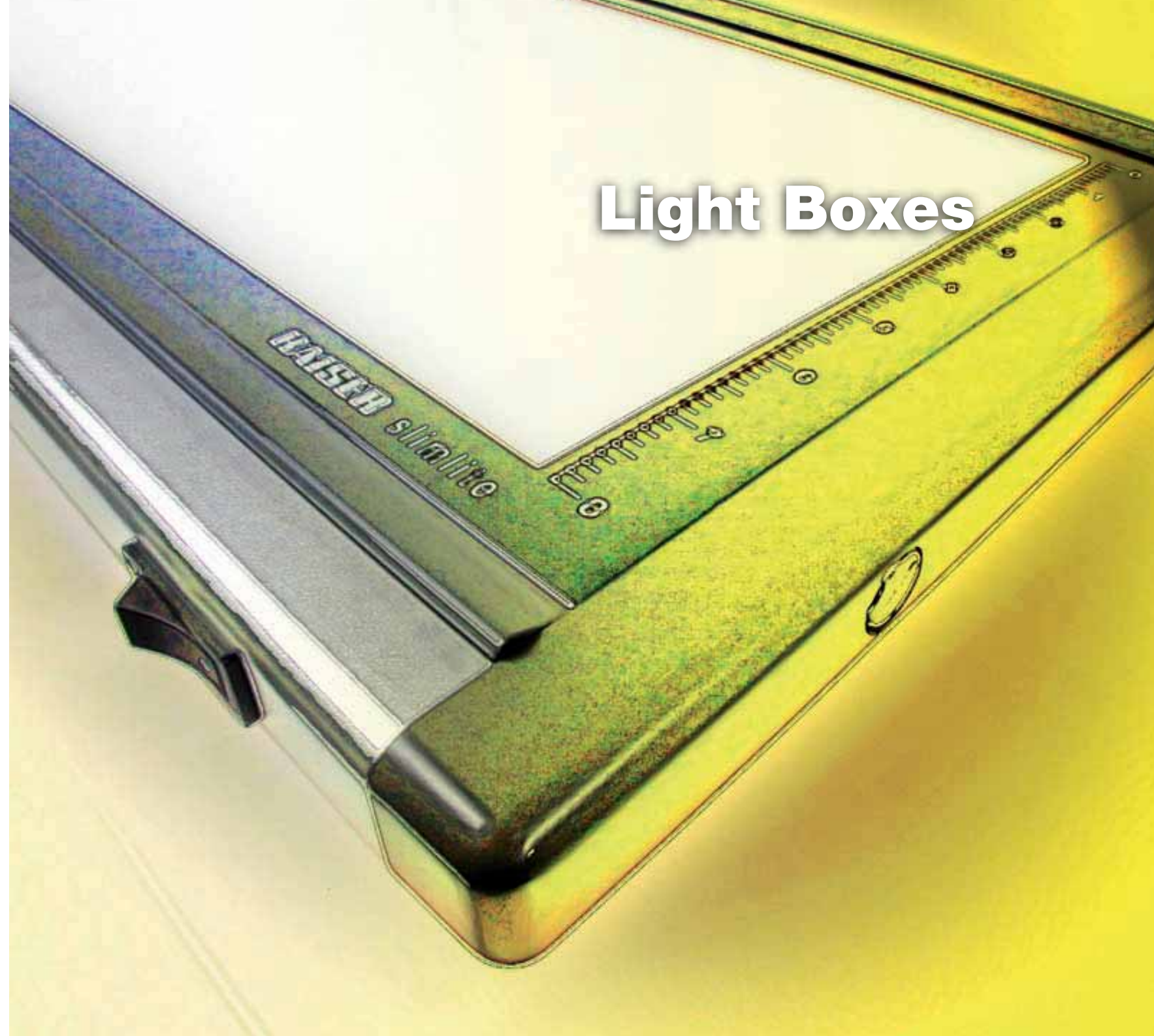


Light Boxes



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 the photographic reproduction 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 daylight-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.

Above all, 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.





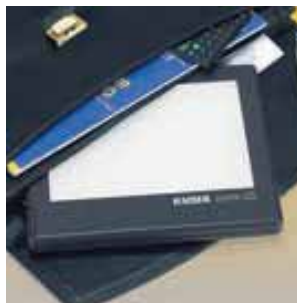
2447-49 „slimlite LED“ Light Box

A compact and handy, super-flat daylight light box. Uniform illumination as a result of special light conducting and reflecting technology in conjunction with LEDs. Service life: approx. 10,000 hours. Color temperature approx. 5000 Kelvin. ON/OFF switch. Protective cover included.

2447: 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.)
Power consumption: 1.2 W
Battery powered: 6 x 1.5 V AAA-type
Mains operation: with mains adapter 2419. Supplied without batteries or mains adapter.

2448: 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. 550 g (1 lbs. 3 oz.)
Power consumption: 2 W
Battery powered: 6 x 1.5 V AA-type
Mains operation: with mains adapter 2419. Supplied without batteries or mains adapter.

2449: Viewing area: approx. 30.5 x 20 cm (12 x 8 in.)
Light box with fold-out feet and clamping strip. Can be wall-mounted.
Dimensions (WxHxD): approx.
37 x 2.5 x 27.5 cm (14.6 x 1 x 10.8 in.)
Weight: approx. 1300 g (2 lbs. 14 oz.)
Power consumption: 6 W
Mains operation with separate mains adapter (included).



2419 Mains Adapter

To operate the 2447 and 2448 „slimlite LED“ light boxes on the mains.

2450-52 „slimlite LED“ Light Box

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

2450: 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.)
Power consumption: 8 W
Mains adapter: 24 V, 2 A

2451: 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.)
Power consumption: 12 W
Mains adapter: 24 V, 2 A

2452: 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.)
Power consumption: 15 W
Mains adapter: 24 V, 2 A





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.
2406 is not available in 120 V.

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.
All sizes are available in 120 V.

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

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

Code no.	Illuminated area (cm/inch)	Lamps	Dimensions (cm/inch)	Special features	Replacement lamps (Set of 2 resp. 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	HF HF, dimmable	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		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		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	HF HF, dimmable	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		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		2476
2406	50 x 60 cm / 19.7 x 23.6 in.	4 x 13 W	56 x 6 x 66.5 / 22 x 2.4 x 26.3	HF HF, dimmable	2477
2426	50 x 60 cm / 19.7 x 23.6 in.	4 x 13 W	56 x 6 x 66.5 / 22 x 2.4 x 26.3		2477
2436	50 x 60 cm / 19.7 x 23.6 in.	4 x 13 W	56 x 6 x 66.5 / 22 x 2.4 x 26.3		2477

2492-93 „prolite scan SC“ Light Box

Professional light box for transparent originals of all types, e.g. slides, negatives, X-rays and microfiches. Color temperature 5000 Kelvin. Four Dulux fluorescent lamps with high color reproduction index CRI = 90-100. Very high illuminance: approx. 50.000 lux. High-frequency operating system (frequency approx. 40 kHz) for flicker-free start-up and operation. Especially suitable as backlight source for use with scanner cameras. No stroboscopic effects, hum and induction interferences. Low-noise, vibration-free fan cooling permits unlimited continuous operation with minimum warming of the viewing surface. Operating hours counter. Working surface with 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.)

2493 with additional brightness control for continuously variable dimming down to 10% of maximum light output.



2414,
2487

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.



2395





2441 "prolite 5000 HiQ" Light Box

Professional transmitted light source for all kinds of transparent originals. Can also be used for industrial applications (can be attached to Bosch and Item building kit systems).

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 of high-quality color reproduction properties. 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 if required).

High frequency operation system (approx. 40 kHz) for flicker-free start-up and operation. Especially suitable for use with scanning cameras. No stroboscopic effects, hum or induction interference. 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.)



2136,
2477