

These operating instructions form part of the appliance. They must be kept ready to hand and passed on to subsequent users. Ask your supplier if you do not understand something. The manufacturer reserves the right to make further improvements to this appliance without documenting this in every case. Your supplier will be happy to give you information on how up-to-date these operating instructions are.

1. Proper use

This appliance is used for checking the movement of rotating and vibrating objects. It must only be used in accordance with these operating instructions. The appliance must not be altered in any way. The manufacturer will not be liable for any damage resulting from incorrect or improper use. This will also render the guarantee null and void.

2. Safety information

- WARNING!** Under strobe lighting, moving objects appear stationary or in slow motion. The objects should never be touched.
- WARNING!** The appliance must not be used in explosion hazard areas.
- WARNING!** Store the appliance in a dry place. It must not be exposed to water (dripping or splashing). No objects filled with liquids (e.g. vases) should be placed on the appliance.
- WARNING!** Strobe lighting can trigger epileptic fits in those who are susceptible.
- CAUTION!** Repairs to the stroboscope should only be carried out by the manufacturer or supplier.
- CAUTION!** The stroboscope's electronic components contain environmentally harmful substances. They must be disposed of in accordance with the relevant national environmental guidelines.

3. Assembly and connection

Point the stroboscope at the object to be observed. On the bottom of the stroboscope are 3 threaded holes, which allow you to fix it to the equipment to be observed or a stand (available as an option):

- Centre = 1 x 1/4" threaded hole
- Right and left, with a total distance of 60mm = 2 x M5 threaded holes

The stationary stroboscope has three connection sockets on the reverse of the appliance which share some identical functions and therefore offer a high level of flexibility. The possible uses and labelling of these sockets are as follows:

Marking: 1 / Use: Trigger signal input, connection of voltage supply.

Marking: 2 / Use: Trigger signal input, connection of voltage supply.

Marking: Output / Use: Output of a trigger signal that is input into 1 or 2, connection of voltage supply.

The assignment of plug contacts is shown in (Fig. 1).

- CAUTION!** Please make the connections in accordance with the wiring diagram (Fig.1). The trigger input is potential-free. The potential-free input is suitable for PNP and NPN signals. A matching plug for these input sockets is included with the appliance.

RECOMMENDATION! Use a shielded cable to connect the trigger signal.

CAUTION! Do not trigger the appliance with signals above 120,000 FPM.

- Typical connection examples:
Please take connection examples from Figures 2 to 5. Please note that you will need optional accessories for some of the examples (stroboscope control unit, AC Adapter, sensor)
- a) Trigger signal and supply voltage from external equipment (Fig. 2)
 - b) Trigger signal from external equipment (Fig. 3), supply voltage from optional AC Adapter
 - c) Trigger signal from optional sensor (Fig. 4), supply voltage for appliance and sensor from optional AC Adapter
 - d) Trigger signal from optional, hand-operated stroboscope control unit (e.g. RT Strobe control or RT Strobe eco control), supply voltage from optional AC adapter (Fig. 5)

The power is either supplied by the appliance power supply unit (available as an option) or the equipment being observed.

The appliance requires an external trigger source. Possible trigger sources include a stroboscope control unit, an external machine or a sensor.

- NOTE!** When using the stationary stroboscope without stroboscope control unit, the stroboscope flashes with the trigger signal of the connected equipment. This signal cannot be influenced without a stroboscope control unit.

4. Controls

- On the reverse side of the device you will find the following controls. Use of these controls is explained in the following section:
- Rocker switch marked POWER: Switching the appliance on and off
 - Rotary knob marked BRIGHT/SHARP: Adjusting the flash duration brightness/sharpness
 - Rocker switch marked INPUT: Selecting whether socket 1 or 2 should be used for the trigger signal input.

CAUTION: This rocker switch only alternates between the trigger signals. It is still possible, to feed the supply voltage through both sockets.

5. Operation

- a) Aligning the appliance and switching it on:
 - Point the stationary stroboscope at a moving object and switch it on. The red LED inside the rocker switch indicates that it is ready for use. If the LED flashes, the appliance is connected to the voltage supply but no trigger signal is present. If the LED remains constantly lit, the appliance is receiving both voltage and a trigger signal.
 - As soon as the trigger signal is applied, the appliance will start to flash with the trigger frequency.
 - If the flashing frequency coincides with the movement frequency, a stationary image will appear.

- PLEASE NOTE:** A stationary image will not only appear with an identical flashing frequency, but also with multiples and fractions thereof.

- b) Switching between sockets 1 and 2.
- Use the rocker switch located between the two sockets to select which socket will be used for the trigger signal input.

CAUTION: Ensure that an input signal is present for the selected socket.

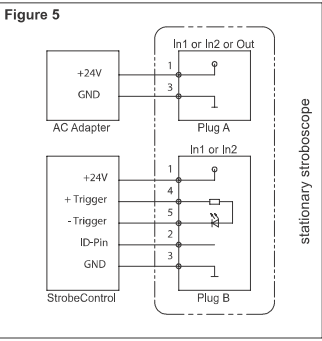
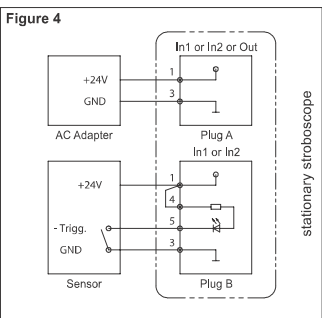
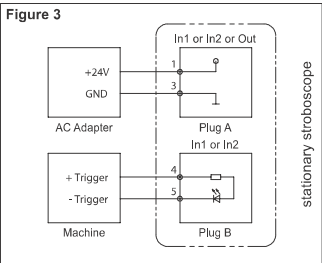
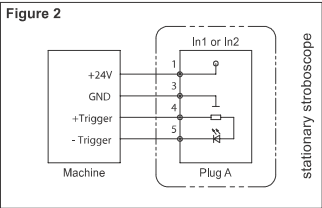
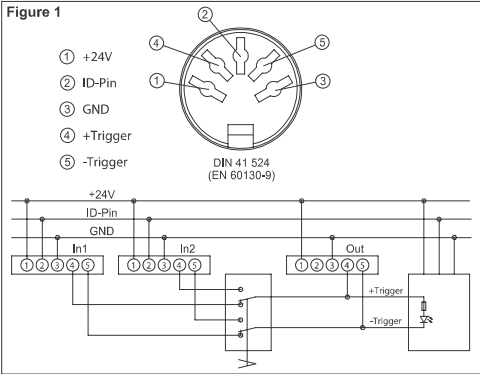
- c) Adjusting the flash duration.
- You can adjust brightness and sharpness according to your requirements using the rotary knob marked SHARP/BRIGHT with the symbols $\circ/\ast$.
- To reduce the brightness, and increase sharpness, turn the knob anticlockwise towards $\circ$ (SHARP).
- To increase brightness and reduce sharpness, turn the knob clockwise towards $\ast$ (BRIGHT).

6. Equipment supplied

- stationary stroboscope
- Operating instructions
- 1 connector for trigger input and power supply

7. Accessories, optional

- Stand/wall mount
- AC Adapter
- Connector for trigger signal/supply connection
- stroboscope control units, handheld device for stroboscope control and regulation.
- Trigger sensors with corresponding cables.



Printed CE-Conformity on request

We reserve the right to make technical changes without prior notice. We have taken the utmost care to prevent errors. Liability in the event of any errors shall be excluded.

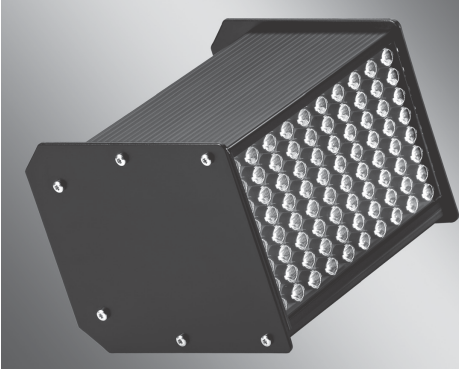
8. Technical Data

General Parameters	
Frequency range	0...120,000 FPM (flashes per minute)
Power supply	24 VDC (+/- 10%) / 15 W
	DIN 415245-pin standard plug
	universal power supply unit available
External trigger input	3...30 V / max. 5 mA
	potential-free optocoupler
	DIN 41524 5-pin standard plug
	Uout = Uin, max. 200 mA
	switchable trigger input
Triggeroutput	for parallel connection
Flash Parameters	
Light intensity/sharpness	adjustable with turning knob
Light intensity single flash	approx. 0,7 Mega-Lux / 30cm / 12"
Light intensity	max. 6,000 Lux / 30 cm / 12"
Illumination area	20x30 cm / 8x12"
Flash colour	approx. 5,000...8,300 K
Housing	
Material	Aluminium
Dimensions	150x130x112 mm / 6.0x5.1x4.4"
Weight	950 g
Ambient Conditions	
Ambient temperature	0°...40°C (32°...104°F)
Storage temperature	-25°C...70°C (-13...158°F)
Humidity	max. 95% not condensing
Certifications	
Certificate of CE conformity	

S.I. Instruments
256 South Rd. Hilton
South Australia 5033
Ph (08) 8352 5511

info@si-instruments.com.au
www.si-instruments.com.au

Operating Instructions



Stationary stroboscope LED 3000
for industrial use