RISHI STROB SL4

GUARANTEE

12 months guarantee on material and labour. Guarantee is not applied to xenon lamp and in case of opening or improper use.

RESPONSIBILITY

RISHI responsibility is limited to what is established by the guarantee terms. Other responsibilities for direct or indirect damages caused by use of instruments or their parts are not considered. Stroboscopes and their accessories includes high tension circuits : their utilization requires great care and consciousness. The user is responsible of safety.

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RISHI SL4 STROBOSCOPE Instruction manual 01/11/eng

RISHIKESH reserves the right to change the specification or design without prior notice.

Fully complies with CE directives

CE RAEE complies



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INSTRUCTION MANUAL

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TECHNICAL CHARACTERISTICS

FREQUENCY RANGE

200 - 4.000 flashes/min (RPM).

FLASH CONTROL

By internal oscillator, in two ranges, coarse and fine adjustment.

LAMP

High brightness long life xenon white light lamp.

FLASH ENERGY

180 mWs/flash max (depending on frequency range and power supply).

POWER SUPPLY

Double AC/DC power supply (by means of the supplied AC adapter) :

* Internal rechargeable battery.

* 220 Vac - 50/60 Hz.

<u>Battery life :</u> variable from 1 to 4 hours about (depending on frequency range and brightness).

<u>Battery recharging time :</u> about 10 hours. Use only the supplied charger.

DIMENSION : 115 x 70 x 195 mm.

WEIGHT : 0,650 kg.

ACCESSORIES (supplied) Charger.

Fully complies with CE directives.

Operating procedure

USE OF THE FLASHES SUBMULTIPLES

When fast movements are observed, or when a high brightness of flash lamp is necessary, we recommend to make observations using submultiple flashes, to obtain a high flash lamp brightness, a longer life of xenon lamp and a longer battery charger time.

SUGGESTION IN USE

Life of xenon lamp depending on brightness and frequency. High frequency and brightness limited life of the lamp. Use the stroboscope with the appropriate frequency and brightness. When fast motions are measured use Flashes Submultiplies.

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BATTERY RECHARGING

Recharge battery only when it is partly or completely exausted. Don't leave charger always connected to instrument (10 hours max).

- Switch off the instrument.
- Connect the supplied charger to the CHARGE IN socket and to the 220Vac.
- For a complete recharge occurs about 10 hours.
- When the battery is unloaded is however possible to use the stroboscope powered by 220Vac, using the supplied AC adapter.
- Using exclusively the supplied charger.

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OPERATING PROCEDURE

Refer also to "Specification" pag.5

SL4 stroboscope can be powered by the internal battery or by the 220Vac (by means of the supplied AC adapter).

USE WITH BATTERY POWER SUPPLY

Use the stroboscope without connecting cable.

USE WITH 220 Vac POWER SUPPLY

Connect the AC adapter to 220Vac and to the CHARGE IN socket on the back of the instrument.

OBSERVATIONS

- Select the frequency range by the RANGE switch.
- Point the stroboscopic light towards the object to be observed.
- Adjust the frequency by means of the FREQUENCY COARSE and FINE knobs, until to obtain a stationary image of the object under observation.

USE OF THE FLASHES SUBMULTIPLES

This function permits to observe fast motions at lower frequencies, obtaining a higher brightness and a lower wear of xenon flash lamp and battery charge.

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Refer to page 7 for more information.

CAUTION IN USE

Stroboscopes and their accessories include high tension circuits : their utilization requires great care and consciousness. Users are responsible of their safety.

Replacement of the xenon flash lamp

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Before replacement makes a short circuit between the pins of the flash lamp, to discharge the capacitors.

Xenon lamp is very fragile, do not apply any strength between glass and pins.

Handle the lamp by the socket, do not touch the lamp. Replacement has to be made by qualified technicians, RISHI will not accept complaint for accidental breakages of the xenon flash lamp. Follows the mounting instruction supplied with the spare part xenon lamp.

High voltage are present inside the equipment during use and can remain at dangerous levels for same time after switching off. Allow at least 5 minutes after switching off before dismantling the equipment. Makes attention when the xenon lamp is changed.

Flash lamp may be dangerous. Do not look directly at the flash, do not make experiments with your eyes or other people's eyes.

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THEORY and PURPOSE

SL4 stroboscope works according to the stroboscopic principle: it makes motion sequences visible which otherwise cannot be observed by the naked eye.

Synchronizing the flash frequency to the movement of the observed object, and emitting intensive light pulses of short duration, the object to be observed is always illuminated at the same point of its movement, so that it appears to the eye as if it were motionless.

SL4 stroboscope is always used wherever motion sequences have to be analyzed or rotation speeds have to be measured.

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SPECIFICATIONS

RANGE : 2 POSITIONS ROTATING SWITCH

To select the frequency range of the flash lamp.

FREQUENCY : COARSE and FINE KNOBS

To adjust the flash frequency. **COARSE** : coarse adjustment. **FINE** : fine adjustment. Adjust knobs until the object to be observed appears motionless.

ON-OFF SWITCH

To switch on-off the instrument.

CHARGE IN 7,5Vdc - 1,6A

- To recharge the battery (refer to page 7).
- To use the instrument powered by 220Vac (by means of the supplied AC adapter).
- Use exclusively the supplied charger.

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