

S0-901 LED SURGICAL LIGHT



USER MANUAL

SCAN OPTICS

**USER
MANUAL**

SO-901 LED

SURGICAL LIGHTS

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INTRODUCTION

Please read the following information carefully before installing and using the Scan Optics Surgical Lights. Scan Optics is responsible for the safety, reliability and performance of the equipment only if it is used in accordance with these instructions.

This Surgical Light is designed for use by a certified practitioner in an operating theatre as an observation aid during surgery. Environmental storage and packing conditions of 60-95% relative humidity and 10-40 °C, are recommended for this product.

No parts or accessories supplied with this Surgical Lights are supplied in a sterile condition.

Apart from those identified in the instructions within this manual, there are no user-serviceable parts in this Surgical Lights. Scan Optics will retain the discretion to advise whether any repairs may be taken out by external qualified technical personnel, or whether part(s) of the Surgical Lights must be returned to the manufacturer's premises for service or repairs to be carried out under warranty or otherwise. Where appropriately qualified technical personnel are identified by a user, and ratified by Scan Optics, then Scan Optics will make available on request any information which may assist in maintaining or repairing this equipment.

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PARTS LISTS



Figure 1 Light Module (2x)



Figure 2 User Manual



Figure 4 Main Clamp



Figure 3 Power Pack and harness

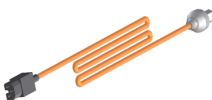


Figure 5 Mains Power Cable



Figure 6 Power Link Cable

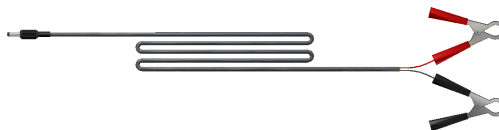
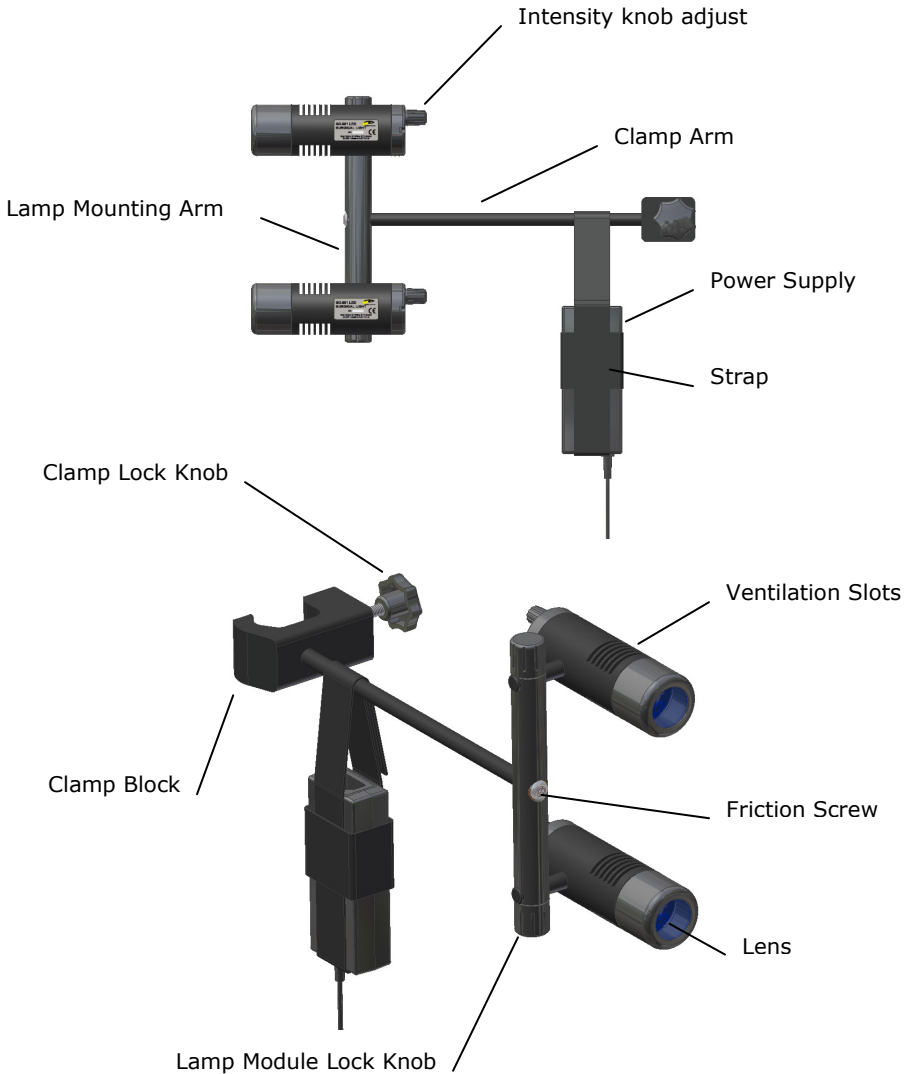


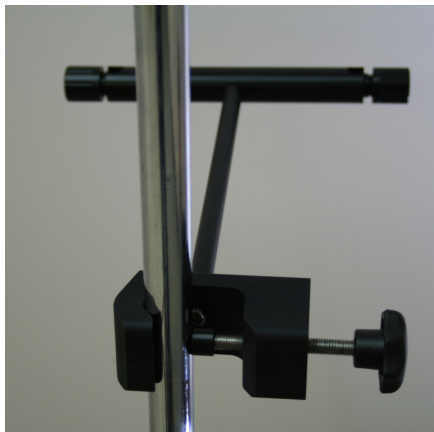
Figure 7 Battery Cable

SURGICAL LIGHT PART NAMES



ASSEMBLY INSTRUCTIONS

1. Clamp the Main Clamp part to a pillar. Rotate the locking knob until tight. Check that the clamp is stable and secure.



2. Ensure that the pin is fully retracted by rotating the locking knob approximately 2 turns.

pin



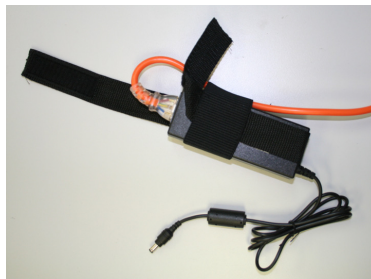
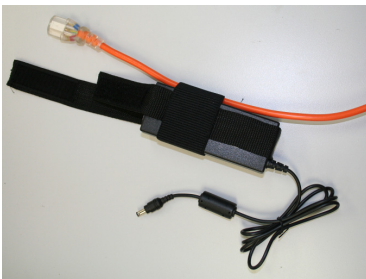
3. Insert the Lamp Module into the mounting bar so that it slightly protrudes through the other side (see picture). Lock the lamp by rotating the locking knob.



4. Connect the Lamp Modules together using the Power Link Cable. Can be plugged into any socket.



5. Feed the orange Mains Cable through the Power Supply Harness as shown in the picture. Loop the lead back and insert into the power pack's IEC socket.



6. Loosen the Velcro strap and hang the power supply on the horizontal arm (or any other convenient location).



7. Connect the output from the Power Supply Pack into either one of the Lamp Module input socket.

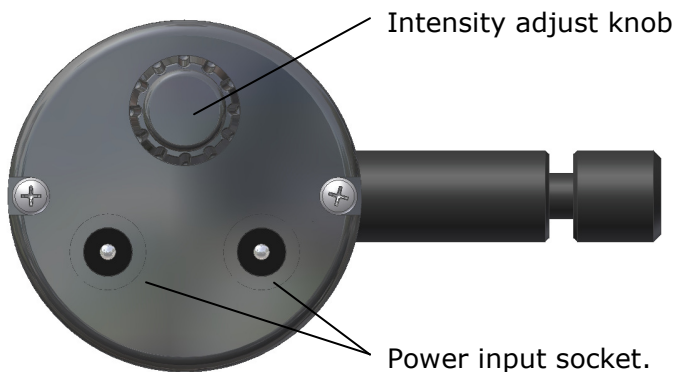




Figure 8 Assembled Surgical Lights attached to drip stand

USING THE SURGICAL LIGHTS

Adjusting Lamp Intensity



To turn the lamp on, rotate the intensity adjustment knob clockwise until a click is heard.

Increase the lamp intensity by rotating it clockwise.
Decrease the lamp intensity by rotating it anticlockwise.

To turn the lamp off, rotate it fully anticlockwise until a click is heard.

TROUBLESHOOTING

SYMPTON	CAUSE	REMEDY
No Light	Not switched on	Turn the intensity knob adjustment clockwise until a click is heard.
	No mains power	Check your AC mains supply. Use alternative power source if AC mains is unreliable.
		Use battery option.
	Power cable not plugged in	Check that the power cable from the Power pack is plugged in securely.
		Check that the Power Link Cable is plugged in securely.
Light too dim	Intensity not set	Turn the intensity adjustment up.
	Low battery charge	Charge the battery fully. A fully charged 12V battery should be around 13.5V.
Device not stable	Clamp not tight	Tighten clamp.
	Lamp Module Locking Knob not tight	Tighten knob.
	Friction Screw loose	Tighten friction screw on the Lamp Mounting Arm.

Lamp Module hot to touch	Obstructed ventilation	Check that the ventilation slots are clear of obstructions.
	Ambient temperature too high	Check the operating temperature. If $>50^{\circ}\text{C}$, device may not function as designed.
	Fan failure	Check for functioning fan. A low hum should be audible through the ventilation. Return to manufacturer if fan has failed.

SPECIFICATIONS

LIGHTING	
Type	Dual 20W High power LED
Beam (half angle)	10°
Colour Temperature	6500K
Lamp life (to 80% max intensity)	50,000hrs continuous
Illumination	6000 lux at 1.0m

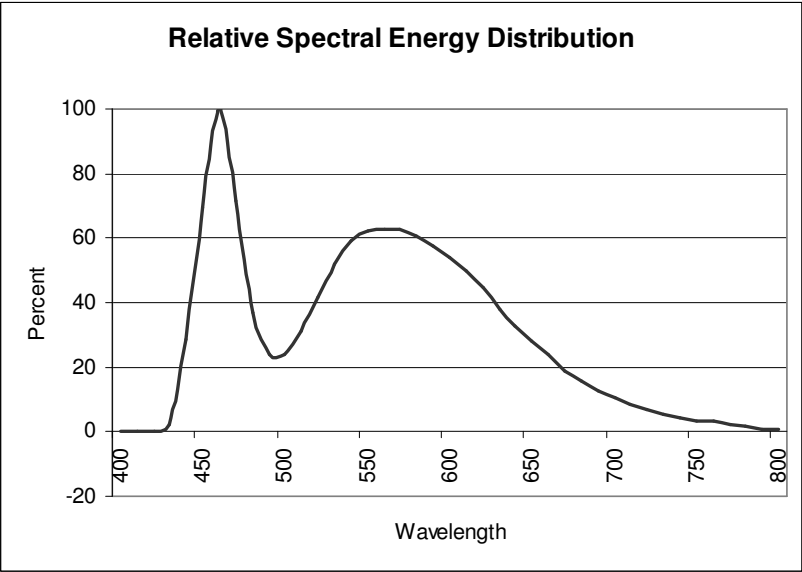
POWER SUPPLY	
Power Pack Mains Input	100 - 240VAC, 50-60Hz
Protection	Over voltage, over current and short circuit protection
Power Pack output	15VDC 4.0A
Lamp Module input	15VDC / 2.0A per module
LED power requirement	15.5 - 21VDC, 2.0A max.
Power Pack Approvals	EN 60601.1 CE

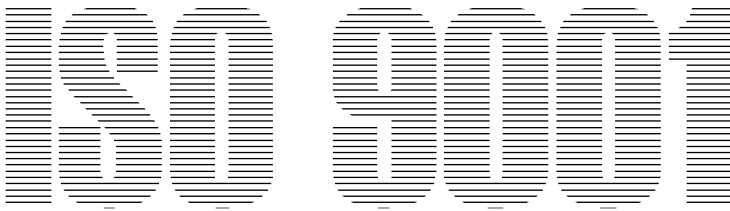
MOUNTING	
Directional	Full 360° individually adjustable in each of 2 axis of rotation
Clamp Throat	10-30 mm

PACKAGING	
Material	Cardboard with foam inserts
Dimensions	370 x 260 x 130 mm
Weight	2.6 kg (5.7 lbs)

OPTIONS	
Battery cable	5.0m

SPECTRAL OUTPUT





Scan Optics is a Quality Endorsed Company, certified to the International Organisation for Standardisation (ISO) standard ISO 9001, *Quality Systems - Model for quality assurance in design, development, production, installation and servicing*. This certification recognises the importance placed by Scan Optics on providing the highest levels of quality in all aspects of business.

The rules for accreditation of a Quality Endorsed Company are laid down in the international standards ISO/IEC Guide 48 and EN 45012. They require a complete auditing of all company systems and procedures by an independent accredited certification body every three years. The QAS (Australia) accreditation is recognised by most of the world's major quality certification bodies including BSI(UK), UL(USA), QMI(Canada), and JQA(Japan). In addition, EQNet Quality Certification which is recognised by some twenty countries, and specific registration with any one of more than sixty national certification bodies, can be provided if required.

To achieve ISO 9001 accreditation requires quality in product design, in manufacture, in customer service and in all internal company systems.



Quality
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Company

WARRANTY

All Scan Optics equipment has been designed and manufactured to provide reliable service and is warranted to be free from defects of material and construction at the time of purchase.

Should the instrument require repair or service due to faulty parts or labour during the period of two years from the date of purchase, this repair will be carried out by Scan Optics or its agents free of charge.

Terms and Conditions

This warranty will not apply if a defect is caused:

- during shipping or transit
- by humidity or dampness
- by operation on a supply voltage other than as specified in the instructions
- by incorrect connection to a power supply
- by alteration or repair by anyone other than a person authorised by Scan Optics, or
- by any other misuse, accident or neglect.

Service and Repair

In the case of a warranty claim Scan Optics should be immediately contacted, either directly or through the agent, distributor, donor or supplier of the equipment. You will need to provide copies of the purchase or delivery documents.

Scan Optics will then send instructions regarding the repair, replacement or return of the equipment.

When freight is arranged by Scan Optics or its agent, the cost of the freight will be accepted by Scan Optics; all other freight costs are the responsibility of the purchaser.



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PLEASE RETURN TO SCAN OPTICS

Please enter the particulars of your purchase below
and return this card to Scan Optics.

Your Organisation _____

Address _____

Name of Supplier _____

Product _____

Serial No. _____

Date of Purchase _____

OUR COMMITMENT TO YOU

We at Scan Optics are committed to the highest quality in our products and in the services we provide.

Our goal is for you to be a satisfied customer of Scan Optics.

We undertake:

- to listen carefully to what you tell us
- to be accurate and honest in telling you about our products and services
- to communicate with you professionally and in clear language
- to deal promptly with any complaints or concerns you may have with us.

WE WELCOME YOUR FEEDBACK

If you would like to comment on any matter relating to a Scan Optics product or service, you can contact us in the following ways:

- by mail, using the attached pre-addressed card if you wish
- by telephone, on
61 (8) 8234 9120
- by facsimile, on
61 (8) 8234 9417
- by e-mail, at
admin@scanoptics.com.au

At Scan Optics we have a system of continuous product improvement. We welcome suggestions at any time for modifications and improvements.

If you wish to discuss a particular item of equipment, please tell us the model and serial number.

We also welcome customers and users of Scan Optics equipment to visit us. If you are able to do so, please contact us so we can make arrangements.



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We at Scan Optics aim to provide the highest level of satisfaction in all of our products and services. Your comments and suggestions for improvement are welcomed.

Name: _____ Date: _____

Address: _____

Product: _____ Serial No: _____

Date Purchased: _____

Comments: _____
