



# **SLR1100**

## **LASER WELDING HELMET**

# **USER MANUAL**



**EN 175**  
**ANSI Z87.1**  
**CSA Z94.3**  
**AS/NZS 1337.1**  
**EN 207**  
**AS/NZS 1337.4**

**△ PLEASE READ AND UNDERSTAND ALL INSTRUCTION BEFORE USE. RETAIN THIS MANUAL FOR FUTURE REFERENCE.**

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# SLR1100 LASER WELDING HELMET

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# SLR1100 LASER WELDING HELMET

## SECTION 1 – SAFETY PRECAUTIONS – READ BEFORE USING

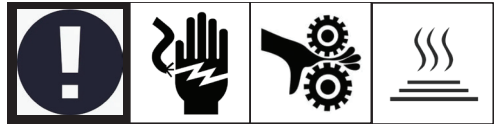
- ! Protect yourself and others from injury — read, follow, and save these important safety precautions and operating instructions.

### 1-1. Symbol Usage

! **DANGER!** – Indicates a hazardous situation which, if not avoided, will result in death or serious injury. The possible hazards are shown in the adjoining symbols or explained in the text.

! Indicates a hazardous situation which, if not avoided, could result in death or serious injury. The possible hazards are shown in the adjoining symbols or explained in the text.

☞ Indicates special instructions.



This group of symbols means Warning! Watch Out! ELECTRIC SHOCK, MOVING PARTS, and HOT PARTS hazards. Consult symbols and related instructions below for necessary actions to avoid the hazards.

**NOTICE** – Indicates statements not related to personal injury.



### **NOISE can damage hearing.**

Noise from some processes or equipment can damage hearing.

- Wear approved ear protection if noise level is high.



### **WELDING HELMETS do not provide unlimited eye, ear, and face protection.**

Arc rays from the welding process produce intense visible and invisible (ultraviolet and infrared) rays that can burn eyes and skin. Sparks fly off from the weld.

- Use impact resistant safety spectacles or goggles and ear protection at all times when using this welding helmet.
- Do not use this helmet while working with or around explosives or corrosive liquids.
- Do not weld in the overhead position while using this helmet.
- Inspect the filter frequently. Immediately replace any scratched, cracked, or pitted cover lenses or filter.
- Lens and retention components must be installed as instructed in this manual to ensure compliance with protection standards.



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## Read Instructions

- Read and follow all labels and the User Manual carefully before in stalling, operating, or servicing unit. Read the safety information at the beginning of the manual and in each section.
- Use only genuine replacement parts from the manufacturer.
- Perform installation, maintenance, and service according to the User Manual, industry

## 1-2. Warnings

It is the user's responsibility to ensure that the filter used to protect the eye from laser radiation matches the laser source used . Not wearing eye protection or choosing inappropriate eye protection device can result in injury or blindness !

Please refer to the applicable standards and ask the person responsible for laser safety about how to choose the most appropriate eye protection device for the laser source you are using.

Laser welding helmets are not designed to protect the eyes from intentional, continuous or repeated direct exposure to laser beams, but to prevent accidental, temporary exposure to scattering and diffuse laser light. In addition, both the limit value and resistance tests are based on a maximum exposure time of 5 seconds.

Laser welding helmets are marked with the wavelength range and associated degree of protection provided, in accordance with European standard EN 207:2017.

Users must comply with the following instructions:

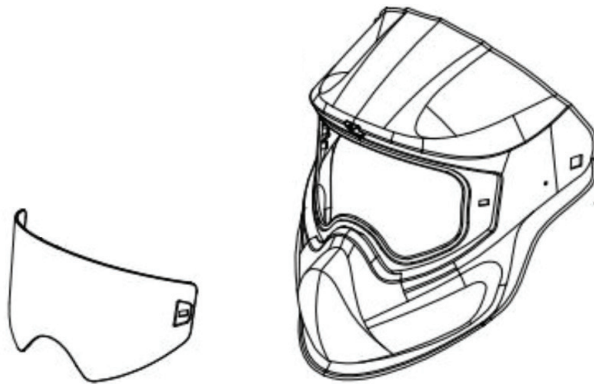
- Please consult the laser safety officer about appropriate eye protection equipment for the laser source used.
- Check the marking on the eye protection device and ensure that the specifications of the wavelength and protection level printed on the device are appropriate for the laser source used.
- Check the light transmittance specifications of the filter in the specification sheet.
- People working in areas where there is a risk of exposure to laser radiation must wear laser protection device.
- The eye protection device offers limited protection against the risks of impact and is neither impene-trable nor unbreakable. It should therefore not be used to protect against the risks of impact or contact with hazardous Fluids.
- Never look directly into the laser beam, even if you have the eye protection device.
- Do not use this eye protection device while driving, engaging in recreation or sports activities, or any other activities that are not designed for.
- Keep these instructions with a protective device.
- Please refer to the user manual for technical information and performance of the eye protection device you own.



# SLR1100 LASER WELDING HELMET

## SECTION 2 – SPECIFICATIONS

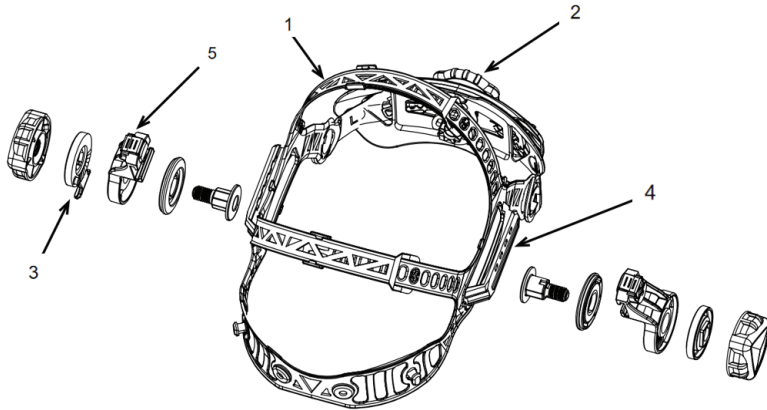
Helmet Shell	Special Nylon (Flame Retardant)
Filter	Special Polycarbonate Compound
Filter Dimension	7.6 x 4.7 x 0.09 in. (193 x 120 x 2.4 mm)
View Size	6.73 x 4.63 in. (171 x 117.6 mm)
Shade No.#	W3.0#
Visible Light Transmission	10% (W3.0)
Filter Peak Wavelength VLT	530nm 32%
Red Light(635nm) Transmittance	11%
Wavelength 900-1000nm	OD6+
Wavelength 1000-1100nm	OD7+
Operating Temperature	14 F to 149 F / -10 C to +65 C
Storing Temperature	-4 F to 185 F / -20 C to +85 C
Warranty	12 Months From Date Of Purchase





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## SECTION 3 – ADJUSTING THE HEADGEAR



☞ There are four head-gear adjustments: headgear top, tightness, angle adjustment, and distance adjustment.

1. **Headgear Top Adjustment**  
Adjusts headgear for proper depth on the head to ensure correct balance and stability.
2. **Headgear Tightness Adjustment**  
To adjust, turn the adjusting knob located on the back of the headgear left or right to desired tightness.
3. **Angle Adjustment**  
Slots on the right side of the headband provide adjustment for the forward tilt of the helmet. To adjust, lift and reposition the control arm to the desired position.
4. **Distance Adjustment**
5. **Headgear Screw**  
Adjusts the distance between the face and the lens. To adjust, loosen headgear screws and slide headgear forward or back-ward to one of the three slots on the slider. Tighten screws. (Both sides must be equally positioned for proper vision.)



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## SECTION 4 – REPLACING THE FILTER

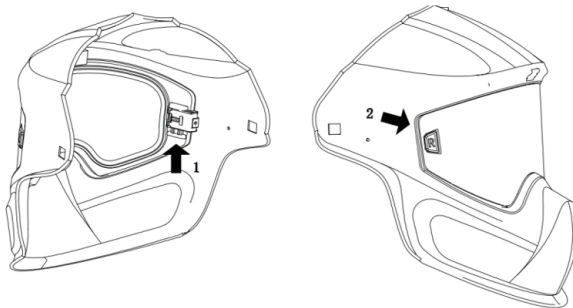
The Filter is a protection lens and must be replaced if broken, damaged or covered with laser welding spatter to the extent that vision is impaired.

Push the plugs inside the helmet up, see position 1, The Filter will be released from the helmet; pull the Filter out. see position 2.

Insert the Filter, it is necessary to locate the button into the corresponding hole in the helmet, then push the plugs inside the helmet down and lock the visor.

The user must always make sure the Filter is fitted properly and is locked well and there are no visible gaps.

See illustration below.





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## SECTION 5 – MAINTENANCE

**NOTICE** – Never use solvents or abrasive cleaning detergents.

**NOTICE** – Do not immerse the lens assembly in water.

The helmet requires little maintenance. However, for best performance clean helmet after each use. Using a soft cloth dampened with a mild soap and water solution, wipe the cover lenses clean. Allow to air dry. Occasionally, the protection lens should be cleaned by gently wiping with a soft, dry cloth.

## SECTION 6 – MARKINGS & STANDARDS APPLIED

### Marking of the Laser Protective Lens

1. For the laser protective lens frame: **1050-1100 D LB6 + I LB8 + R LB7 + M LB8Y CSS CE** according to EN 207:2017 with

- 1050 - 1100: Applicable laser wave length range;
- CSS: Manufacturer code STRATA CSS;
- D LB6: Laser protection rating of LB6 for mode “D” (CW mode) according to EN 207:2017, clauses 3.3, Table 1 and 6.1;
- I LB8: Laser protection rating of LB8 for mode “I” (HPP mode) according to EN 207:2017, clauses 3.3, Table 1 and 6.1;
- CE: CE as per PPE Regulation (EU) 2016/425, Article 17 required for Cat. II products.

The letter “D” denotes a CW laser having a pulse length of  $>0.25$  s.

The letter “I” denotes a pulsed laser, having a pulse length between  $1 \mu\text{s}$  and  $0.25$  s

The LB rating specifies the damage threshold of the filter material at maximum power or energy density.

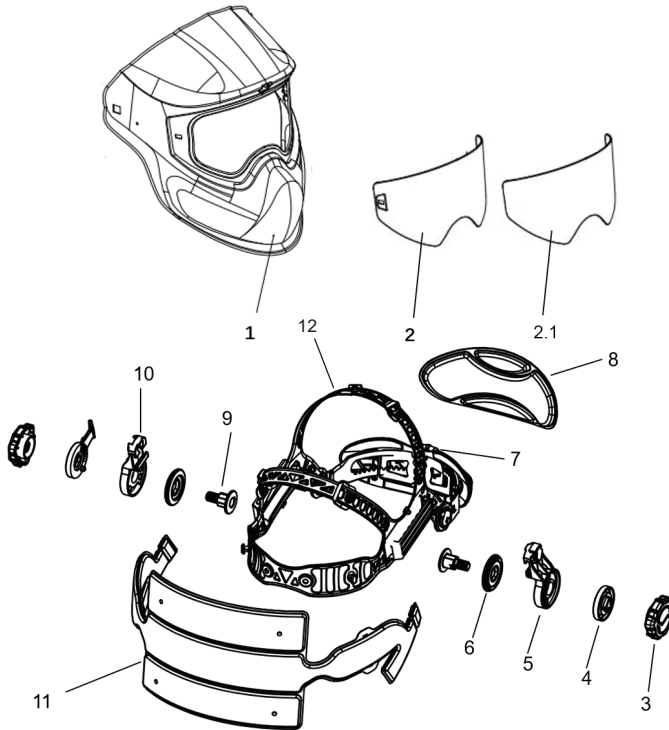
The Helmet does not only absorb (filter) laser light of a given wavelength, but is also be able to withstand a direct hit from the laser without breaking or melting, for the specified time period of  $>5$  s in CW mode or for 50 pulses (s. Annex: Test Report).





# SLR1100 LASER WELDING HELMET

## SECTION 7 – PARTS LIST



Part Name:	Part Number:
1. Helmet shell	SLR1100-1
2. Filter lens	SLR1100-2
2.1 Filter protective film	SLR1100-2.1
3. Block nut	SLR1100-3
4. Block washer	SLR1100-4
5. Headgear slider (with 5 slots)	SLR1100-5
6. Screw washer	SLR1100-6
7. Headband adjusting button	SLR1100-7
8. Cushion	SLR1100-8
9. Screw	SLR1100-9
10. Segmental position plate (on right)	SLR1100-10
11. Sweatband	SLR1100-11
12. Headgear assembly complete	SLR1100-12



# SLR1100 LASER WELDING HELMET

## SECTION 8 – WARRANTY

As part of an on-going commitment to excellence in product support, Euroquip offers a comprehensive product warranty program.

In order to qualify for full warranty support, your product must be registered. Product not registered with Euroquip is supported by a base 12 month warranty only. Spare parts and technical support will not be available for an unregistered product outside of this base warranty period. If a Euroquip dealer has not already registered your product, please register it online or download a physical registration form at [www.euroquip.co.nz](http://www.euroquip.co.nz).

### **Registered warranty period for the SLR1100 Laser Welding Helmet:**

**Commercial Use: 12 Months**

**Domestic Use: 12 Months**

Warranty covers failure caused by manufacturing and material defects in the product, during the warranty period specified. The warranty period begins when the product is purchased by the end user. Warranty is not transferable and is only claimable by the original purchaser.

Warranty does not cover parts that are subject to wear and tear from usage.

Warranty covers failure of a product caused by defective materials and/or manufacturing for the period given and the usage specified by Euroquip. The warranty period begins when the product is purchased by the end user. Warranty is not transferable and is only claimable by the original purchaser.

Warranty also does not cover failure caused by the untimely replacement or service of the above wearing parts. Evidence must be provided that the product has been maintained and serviced suitably for a claim to be considered under warranty.

Failure caused by incorrect operation of the product, lack of proper care and maintenance of the product, external damage, external circumstances such as contaminated fuel or poor water supply, modifications to the product, attempted repair/ service by a party other than an Approved Service Agent, is not covered under warranty.

Warranty does not cover pre delivery service and adjustment, or failure that may occur as a result of lack of/ incorrect pre delivery service and adjustment.

Warranty does not cover any incidental, indirect or consequential loss, damage or expense that may result from any defect, failure or malfunction of a product.

Should any issue be found to be a combination of a warranty failure and a non-warranty issue, the repair cost component to rectify and repair the non-warranty failure is the customers' full responsibility.

The decision that an issue with a product qualifies as a warranty claim is made at the sole jurisdiction of Euroquip.

No costs incurred will be considered under warranty if repairs are carried out by a party other than a Euroquip Approved Service Agent, unless with prior consent in writing from Euroquip.

It is the responsibility of the purchaser to deliver a product under warranty to the nearest relevant service agent or product reseller. Warranty does not cover call outs, mile- age and freight costs.

If a product is repaired under warranty, parts and labour required for the repair will be supplied at no charge.

Warranty assessment and repair will be scheduled and executed according to the normal work flow at the service location and depending on the availability of suitable replacement parts.

This warranty policy is an additional benefit and does not affect the legal rights of any end user, reseller or service agent.



**Scan here to register your product**

<http://www.euroquip.co.nz/Contact+Us/Product+Registration+Form.html>





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