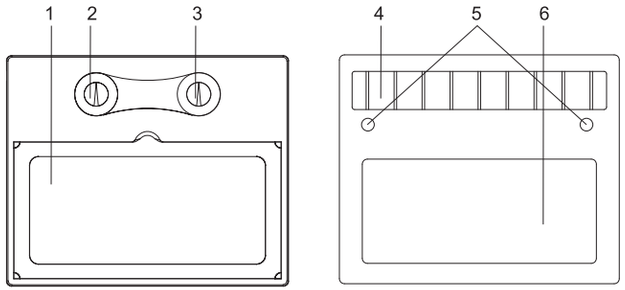
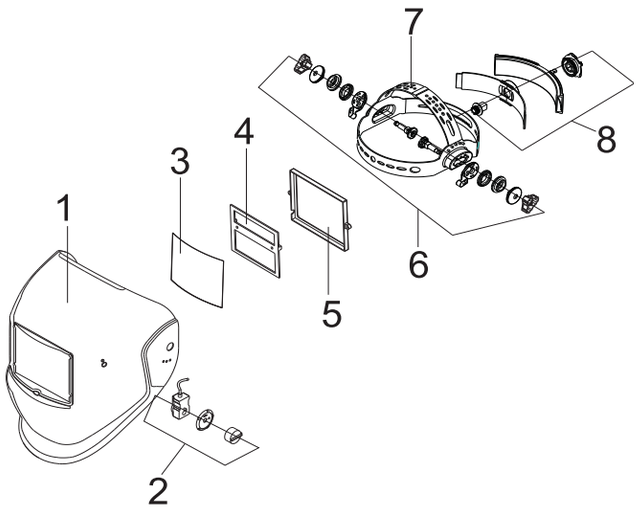
Parts



Part	Description
1	LCD
2	Delay Control Knob
3	Sensitivity Control Knob
4	Solar Panel
5	Arc Sensors
6	UV/IR Filter



Part	Description
1	Helmet Shell
2	Shade Control Knob
3	Front Cover Lens
4	ADF
5	Retaining Frame
6	Headgear Angle Adjusting Knobs
7	Headgear Height Adjusting Pin
8	Headgear Diameter Adjusting Knob

Trouble Shooting

PROBLEM(S)	POSSIBLE CAUSE(S)	SUGGESTED SOLUTION(S)
Difficult to see through filter	Front cover lens dirty	Clean or replace front cover lens
	Filter cover lens dirty	Clean filter cover lens
Filter does not darken when arc is struck	Grind Mode Selected	Adjust Shade from 9 to 13
	Sensors or Solar Panel blocked	Make sure sensors or solar panel are exposed to weld arc without blocking
	Set Sensitivity to LOW	Adjust sensitivity to required level
Filter darkens without arc	Set Sensitivity to HIGH	Adjust sensitivity to required level
Filter remains dark after welding	Set Delay to MAX	Adjust sensitivity to required level

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Guarantee

If this product fails through faulty materials or workmanship, contact our service department direct on: +44 (0) 1926 818186. Normal wear and tear are excluded as are consumable items and abuse.

TOOL CONNECTION
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6094

LASER®

Welding Helmet

Auto Darkening

User Manual

Warning!

The Solar-Powered Auto-Darkening Welding Helmet is suitable for most welding applications. This helmet's 1/25,000-second switch time automatically darkens the lens the moment you start welding. No matter what shade the filter is set to, the UV/IR protection is always present.

Safety

ARC Rays can injure eyes and burn skin

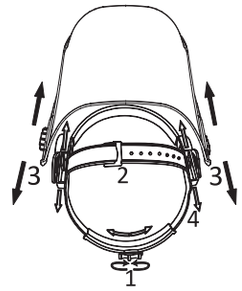
- Before welding, always inspect helmet and auto-darkening filter (ADF) to be sure they are fitted properly and in good condition.
- Keep the sensors, solar cell and filter lens clean. Clean the filter cartridge using a soapy water solution and soft cloth. Do not use solvents or abrasive cleaning detergent.
- Do not weld in the overhead position while using this helmet.
- Inspect the filter lens frequently and immediately replace any scratched, cracked, or pitted filter lens or cover lenses.
- Always wear safety glasses or goggles under the welding helmet, and protective clothing to protect your skin from radiation, burns and spatter.

Specifications

Viewing Area	92×42mm
Cartridge Size	110×90mm
UV/IR Protection	UP to shade DIN 16 at all times
Light State/Grind Mode	DIN 4
Dark State	Variable shade, DIN 9 ~ 13
Switch Time	1/2,5000S, from Light to Dark
Dark to Light Time/Delay Control	0.1-1.0S, by infinitely dial knob
Sensitivity Control	Low - High, by infinitely dial knob
Power Supply	Solar cell and non-replaceable lithium battery
Power On/Off	Fully automatic
Arc Sensor	2
TIG AMP Rating	DC≥10, AC≥10
Operating Temperature	-5°C to +55°C
Storing Temperature	-20°C to +70°C
Compliance	DIN EN 379:2009-07, DIN EN 175:1997-08

Operation

Headgear Adjustment



1. Adjust the headgear diameter with the twist knob on the back. The knob is locked until pushed in. Once unlocked, twist clockwise to tighten and counterclockwise to loosen.
2. Adjust the height by snapping the pin into the hole to lock securely in place.
3. To adjust the viewing angle, loosen the knob and push the helmet forward and back to the desired tilt position. Once the angle is correct, tighten the knobs until snug. The helmet should still swing up, but it should not drift downward when in place for welding.
4. To adjust the distance between the user's face and ADF, loosen the outside tension knobs to allow for headgear to be repositioned to a different location. This should be done one side at a time and both sides should be located the same for proper auto-darkening filter operation.

Shade Control/Grind Mode

Select the shade 9 to 13 based upon the welding process you will use by consulting the "Shade Guide Table". The variable shade control knob is mounted to shell for external adjustment.

The welding helmet can also be used to protect the face when grinding. Grind mode prevents filter lens from auto-darkening.

Welding Process	Arc Current(Amperes) 1.5	6	10	15	30	40	60	70	100	125	150	175	200	225	250	300	350	400	450	500	600
SMAW					8			9	10		11		12		13		14				
MAG							8	9	10		11		12		13		14				
TIG				8		9		10		11		12		13							
MIG(heavy)								9		10		11		12		13		14			
MIG(light)										10		11		12		13		14			
PAC									9	10	11		12		13						
PAW	4		5		6		7	8	9		10		11		12						

Note
- ★SMAW-Covered electrodes
- ★MAG-Metal arc Welding
- ★TIG-Gas Tungsten Arc Welding
- ★MIG(Heavy)-MIG with heavy metals
- ★MIG(light)-MIG with light alloys
- ★PAC-Plasma jet cutting
- ★PAW-Microplasma arc welding

Delay Control

When welding ceases, the viewing window automatically changes from dark back to light but with a pre-set delay to compensate. The delay time can be set to MIN (0.1 sec) or MAM (1.0 sec), by infinitely dial knob inside the cartridge. The minimum delay suits spot or short welds. The maximum delay suits heavy current welding and reduces eye fatigue from the arc. Selections between MIN and MAX are suitable for most of indoor and outdoor welding operations.

Sensitivity Control

The sensitivity can be set to LOW or HIGH by using the infinitely dial knob on the back of the cartridge. The LOW setting suits excess ambient light or with another welding machine close by. The HIGH setting suits low amperage welding and welding in areas with low light conditions, especially low amperage argon arc welding. Selections between LOW and HIGH are suitable for most of indoor and outdoor welding operations.

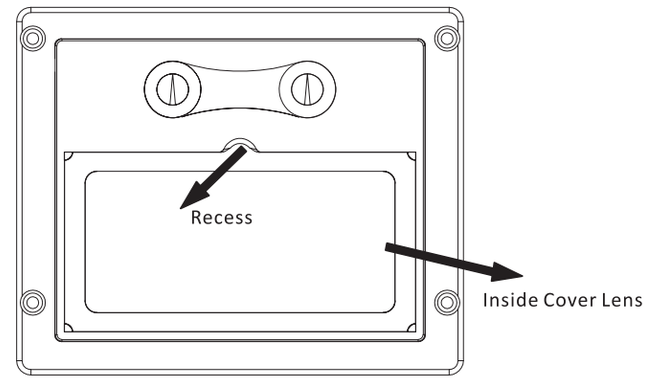
Operation

Front Cover Lens Replacement

Replace the front cover lens if it is damaged (cracked, scratched, pitted or dirty). Place your finger or thumb into the recess in the bottom of frame and flex the front cover lens upwards until it releases from one edge. Then remove any protective film before installing the new one.

Inside Cover Lens Replacement

Replace the inside cover lens if it is damaged (cracked, scratched, pitted or dirty). Place your finger or thumb into the recess as marked below and flex the inside cover lens upwards until it releases from one edge. Then remove any protective film before installing the new one.



Cleaning and Storing

Keep the sensors, solar cell and filter lens clean. Clean filter cartridge and helmet shell by using a soapy water solution and soft cloth. Do not use solvents or abrasive cleaning detergent. Switch the product to Grind Mode and put it in a clean, dry location for storage.