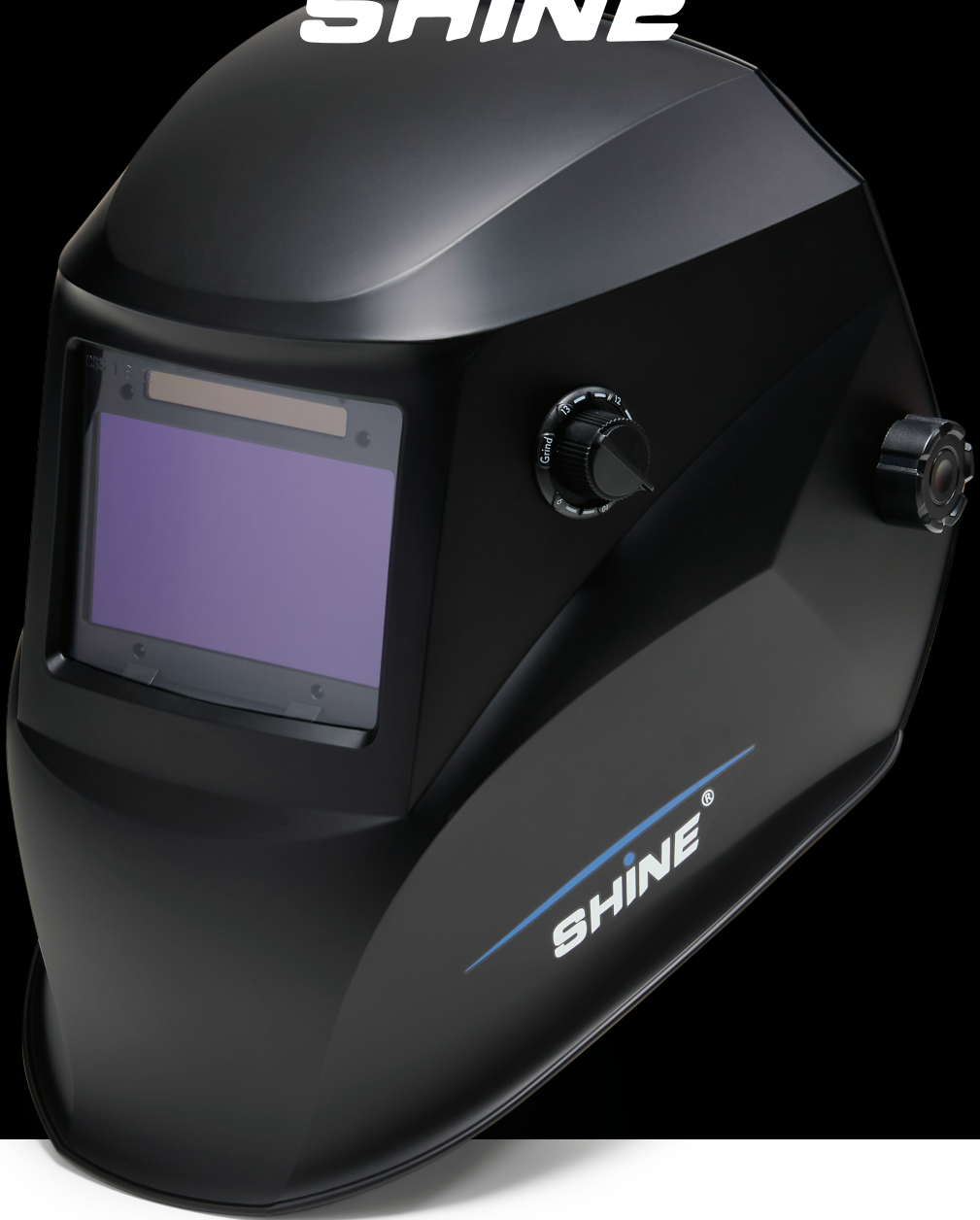


SHINE[®]



SHINE 5000X WELDING HELMET

5000X

Auto-darkening Welding Helmet

WARNING

Read and Understand All Instructions Before Using the Equipment.

SAFETY WARNINGS

The automatic welding mask is a new generation product for labor protection. Some new and high science and technology such as LCD, optoelectronics detection, solar power, microelectronics, etc are integrated into it. The automatic welding mask not only can efficiently protect operator's eyes from injuries caused by arc, but also can make both hands free and strike arc accurately. Therefore, the quality of products and work efficiency may be raised considerably. It may be widely used for various welding, cutting, spraying and arc gouging, etc.

Read and understand all instructions before using.

- Be sure that the dark shade of the lens in the welding helmet is the correct shade number for your application.
- This helmets and lenses are not suitable for "overhead" welding application, laser welding, or laser cutting applications.
- Welding helmets are designed to protect the eyes and face from sparks, spatter, and harmful radiation under normal welding conditions.
- This helmet will not protect against explosive devices or corrosive liquids. Machine guards or eye splash protection must be used when these hazards are present.
- Impact resistant, primary eye protection, spectacles or goggles that meet current CE specifications, must be worn at all times when using this welding helmet.
- Avoid work positions that could expose unprotected areas of

the body to spark, spatter, direct and/or reflected radiation. Use adequate protection if exposure cannot be avoided.

- Check for light tightness before each use. Before each use, check that the protection plates are clean and that no dirt is covering the sensors on the front of the lens.
- Inspect all operating parts before each use for signs of wear or damage. Any scratched, cracked, or pitted parts should be replaced immediately.
- Do not make any modifications to either the welding lens or helmet, other than those specified in this manual. Do not use any replacement parts other than those specified in this manual.

Unauthorized modifications and replacement parts will void the warranty and expose the user to the risk of personal injury.

- If this lens does not darken when striking arc, stop welding immediately and contact representative.
- Do not immerse this lens in water if this model is not water proof.
- Do not use any solvents on any lens or helmet components.
- The recommended operating temperature range for welding lens is -10°C-65°C (14°F-149°F). Do not use this device beyond these temperature limits.

Failure to follow these warnings and/or failure to follow all of the operating instructions could result in severe personal injury. If any of the manual conditions is not kept or followed, the warranty of two years is automatically invalid.

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1. CHARACTERISTICS

The Shine 5000X automatic welding helmet is equipped with a filter set that can become dark. The filter is transparent before welding, so the operators may observe the work surface clearly. When striking arc, the filter darkens automatically immediately. When arc goes out, the filter will become transparent again. The switching time from light to dark is about 0.08 ms. The switching time from dark to light may be set up within 0.1-0.9 second.

The mask is equipped with continuous darkness-adjusting unit, so the operator may select an arbitrary dark shade number ranging from 9-13.

The Shine 5000X automatic welding mask gives the operators permanent complete protection against UV/IR even in transparent condition. The UV/IR protection level is up to DIN15 at all times. The power is provided by solar cells and replaceable battery.

The mask is equipped with 4 sets of photosensors to sense arc light. In addition, the mask is also provided with an outer protection plate made of high polymer materials. The plate is wear-resistant, thermostable, and has no dregs-sticking, thus a very long service life.

2. WARRANTY

The auto-darkening helmets are warranted for 2 years from the date of purchase. The duration of use depends on various factors such as use, cleaning storage and maintenance. Frequently inspections and replacement if it is damaged are recommended. If any of the manual conditions is not kept or followed, the warranty is automatically invalid.

3. TECHNICAL DATA

TECHNICAL DATA	
1. Filter dimension	110 x 90 x 8.5 mm (4.33" x 3.54")
2. Viewing area	100 x 60 mm (3.94" x 2.36")
3. Light Slate Shade	DIN 4
4. Dark Variable Shades	DIN 9-13
5. UV/IR Protection	Up to DIN 15 at all times
6. Switching time (light to dark)	0.08 ms
7. Delay time (dark to light)	0.1-0.9s
8. Sensitivity	Adjustable (internal)
9. Classification	1/1/1/2
10. Grind Function	Yes
11. Power Supply	Solar cells, replaceable battery (CR2450*1PC)
12. Operating Temperature	-10°C-65°C (14°F-149°F)
13. Inside PC lens	106 x 66 x 1mm
14. Outside PC lens	118 x 97 x 1mm
15. Standards	CE EN379,ANSI Z87.1, CSA Z94.3, AS / NZS 1337.1
16. Warranty	2 years

4. OPERATION INSTRUCTIONS

1. ASSEMBLY

- Assemble the mask as shown in the construction and assembly figure

2. THE POWER SUPPLY

- The power of the shine 5000X helmet is provided by solar cells with one replaceable lithium battery CR2450.
- Turning on or off is automatic controlled by circuit.
- You can use this helmet at any time you need and take it away after working without operating any key.
- Using this helmet is fully free like glass filter helmet.

3. DARKNESS SELECTION

- Select the darkness according to the current of the welding process.
- Striking the arc, then observing window darkness immediately and adjust to the optimum darkness is needed.

4. DELAY TIME SELECTION

- By moving the DELAY selector, the time taken for the lens to lighten after welding can be altered from 0.1-0.9 second.
- Turn to MIN
 - The time the lens lighten after welding changes to be shorter.
 - The shortest time is about 0.1 second depending upon welding point temperature and shade set.
 - This setting is ideal for track welding or production welding with short welds.
- Turn to MAX
 - The time the lens lighten after welding changes to be longer.
 - The longest time is about 0.9 second depending upon welding point temperature and shade set.
 - This setting is ideal for welding at high amperage where there is an after glow from the weld.

5. SENSITIVITY SELECTION

- By moving the SENSITIVITY selector, the sensitivity to ambient light changes can be altered.
- Turn to MIN
 - The photosensitivity changes to be lower.
 - Suitable for high amperage welding and welding in bright light conditions (lamp light or sun light).
- Turn to MAX
 - The photosensitivity changes to be higher.
 - Suitable for low amperage welding and using in poor light conditions.
 - Suitable for using with steady arc process such as TIG welding.
- If the helmet can be used normally, we suggest using this helmet with a bit high sensitivity.

6. WELDING/GRINDING FUNCTION

- Welding/grinding function can be selected by moving the adjusting knob.

7. GRIND FLASH

- The light will flash when using grinding function.
- To avoid any harm to eyes, do not conduct welding while on grinding mode.

8. LOCK & UNLOCK

- Turn the ADF frame lock to left(←) to unlock the ADF frame. Turn to right (→) to lock the ADF frame.

9. LOW BATTERY WARNING LIGHT

- The light will flash when the battery is low.

5. HEADBAND

Because the shapes of man's heads vary from person to person, The work position and the observing angle is different.

- The operator may adjust the headband by using the buttons and the segmental positioning plate to select an appropriate observing angle.
- By pushing and turning the adjustment screw, the perimeter of the head band can be adjusted.

6. IMPORTANT NOTES

1. Be sure that the helmet is be used in correct condition and check it according to WARNING content.
2. There is liquid crystal-valve in the filter, although it has inner and outer protection plate, it is important to avoid a heavy knock for breakage.
3. The outer protection plate of helmet should be periodically inspected and cleaned, keep it clear. In case it breaks, cracks, pitting or more serious influencing vision effects occur, the plate must be replaced.
4. In order to operate more efficiently and safely, please select the correct dark shade number.
5. If the filter is no water-proof model, please pay attention to preventing from water.
6. Be sure that the arc light must be received completely by the sensor, if not, the filter will be light or unstable in darkness and potentially damage the eyes.
7. Please use the automatic filter at temperature between -10°C-65°C (14°F-149°F)
8. Please don't disassemble the filter, any problems arise, please contact our company or agent.

7. RECOMMENDED SHADE SETTINGS

Table A.3 –Recommended use of the different scale numbers for arc welding

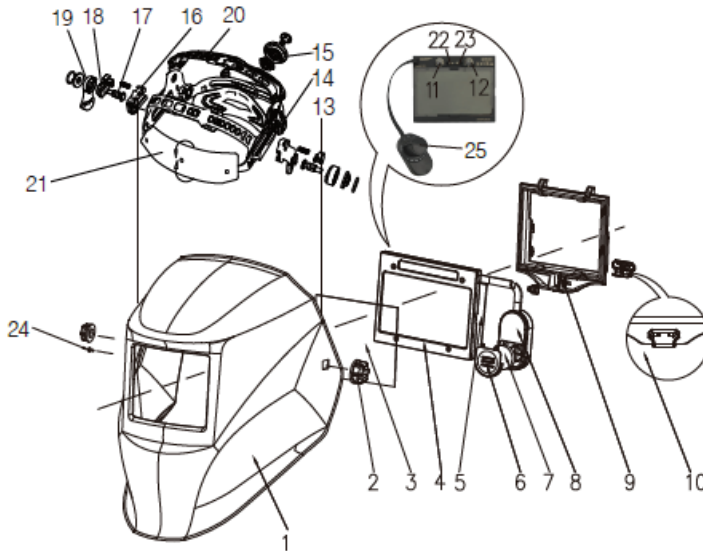
Process	Current A																																			
	1,5	6	10	15	30	40	60	70	100	125	150	175	200	225	250	300	350	400	450	500	600															
Covered electrodes	8				9				10				11				12				13				14											
MAG					8				9				10				11				12				13				14							
TIG	8				9				10				11				12				13															
MIG with heavy metals									9				10				11				12				13				14							
MIG with light alloys													10				11				12				13				14							
Air-arc gouging													10				11				12				13				14				15			
Plasma jet cutting													9				10				11				12				13							
Micro-plasma arc welding	4		5		6		7		8		9		10		11		12																			
	1,5	6	10	15	30	40	60	70	100	125	150	175	200	225	250	300	350	400	450	500	600															

NOTE The term "heavy metals" applies to steels, alloy steels, copper and its alloys, etc.

8. TROUBLESHOOTING

PROBLEM	RESOLUTION
The ADF does not darken when welding.	<ul style="list-style-type: none"> • Stop welding or cutting immediately. • Make sure the sensors are facing the arc and no obstructions. • Check the mode that is on WELD not GRIND. • Review sensitivity recommendations and adjust sensitivity if possible. • Replace the battery if necessary.
The ADF stays dark after welding or there is no arc present.	<ul style="list-style-type: none"> • Adjust the sensitivity to the lower level (LO). • If the welding place is extremely bright, it is recommended to reduce the surrounding light level.
The ADF switching during the welding.	<ul style="list-style-type: none"> • Increase the sensitivity if possible. • Make sure the sensors are facing the arc and no obstructions. • Increase Delay 0.1 – 0.3 second may also reduce switching.
Inconsistent shade number on the corner of ADF.	<ul style="list-style-type: none"> • It is a natural feature and will not be dangerous for the eyes. • In order to get a maximum comfort, try to keep an view angle at around 90°.

9. PARTS BREAKDOWN



NUMBER	PART NAME	NUMBER	PART NAME
1	Helmet shell	14	Headgear slider(with 5 slots)
2	Block nut	15	Headband tightness adjusting knob
3	Outer protection plate	16	Block washer adjustment(up and down)
4	Automatic filter	17	Headband screw(long,on right)
5	Inner protection plate	18	Block washer(on right)
6	Battery cover plate	19	Segmental positioning plate(on right)
7	Replaceable battery (CR2450*1pc)	20	Headband adjustment(back and forth)
8	Potentionmeter container	21	Headband adjusting buttons
9	Frame	22	Low battery warning
10	ADF frame knob	23	Grinding flash
11	Sensitivity knob	24	Positioning point for the segmental plate
12	Delay knob	25	Shade control/grinding switch
13	Block washer(on left)		