

SOLDATECH



TYPE
EWH3(C)



**Read this manual carefully before using
the auto-darkening welding helmet.**

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Storing the User Manual

- Store the user manual near the auto-darkening welding helmet in an accessible location.
- Keep the user manual in a dry place.
- Use the user manual normally without damaging it.
- The use of the auto-darkening welding helmet by individuals who are not familiar with the instructions and procedures described in this manual is strictly prohibited.

This user manual is part of the auto-darkening welding helmet and should therefore be kept with the helmet. If the helmet changes hands, the user manual must be provided with it.

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NLD 1. Symbolen label

ENG 1. Symbols label



NLD Lees voor gebruik de gebruikershandleiding.

ENG Read the user manual before use.



NLD Draag altijd een veiligheidsbril bij het gebruik van de lashelm.

ENG Always wear safety glasses when using the welding helmet.



NLD Draag veiligheidshandschoenen.

ENG Wear safety gloves.



NLD Zorg ervoor dat er voldoende ventilatie is tijdens het lassen.

ENG Ensure there is adequate ventilation during welding.



NLD Vervang versleten of beschadigde onderdelen onmiddellijk.

ENG Replace worn or damaged parts immediately.



NLD Vervang de laslens onmiddellijk als deze beschadigd is.

ENG Replace the welding filter immediately if it is damaged.



NLD Zorg dat de tintinstelling voldoende oogbescherming biedt voor het type werk dat u gaat uitvoeren.

ENG Ensure that the shade level provides adequate eye protection for the type of work you are going to perform.



NLD De lashelm is niet geschikt voor laserlassen.

ENG The welding helmet is not suitable for laser welding.

2. General

Each Soldatech auto-darkening welding helmet is manufactured in accordance with the European Directive EU-2016/425. Each helmet is supplied with a manual and a declaration of conformity, which should be kept and maintained.

As continuous improvements are made to the equipment, the holder of the "Soldatech" brand reserves the right to change the specifications of the equipment described in the manual.

3. Safety Instructions

1. This auto-darkening welding helmet is not suitable for laser welding or oxy-fuel welding and cutting processes.
2. Never place the helmet and the auto-darkening filter on a hot surface.
3. Do not open or modify the auto-darkening filter.
4. This welding helmet does not provide protection against impact and crushing hazards.
5. The helmet does not protect against explosive substances or corrosive liquids.
6. Do not make modifications to the helmet or filter unless otherwise specified in this manual.
7. Use only replacement parts specified in this manual.
8. Unauthorized modifications and replacement parts will void the warranty and may cause personal injury.
9. Stop welding immediately if the helmet does not darken when an arc is struck and contact your supervisor or dealer.
10. Do not immerse the filter in water.
11. Do not use solvents on the filter screen or other helmet components.
12. Use the helmet only at temperatures between -10°C and +55°C.
13. Storage Temperature: -20°C to +70°C.
14. Store the helmet in a dry, cool, and dark place; remove the battery during extended storage.
15. Protect the filter from contact with liquids and dirt.
16. Regularly clean the filter surface with a clean, lint-free cloth; do not use strong cleaning agents.
17. Keep the sensors and solar cells clean.
18. Regularly replace any cracked, scratched, or damaged front lens.
19. Materials that come into contact with the skin may cause allergic reactions under certain conditions.

4. Use

PREPARATIONS BEFORE USE

LOW BATTERY INDICATOR

Batteries should be installed or replaced when the battery indicator flashes (Fig. 1-5).

TEST

- Press the TEST button briefly to check the shade selection before you begin working (Fig. 1-6). When the button is released, the viewing window will automatically return to the light state (shade 3).
- If the auto-darkening filter does not function as described above, do not use it and contact your point of sale immediately.
- The auto-darkening filter may not darken if the sensors are blocked or if the welding arc is fully shielded. Flickering light sources (e.g., safety strobe lights) may activate the auto-darkening filter, causing it to flicker when no welding is taking place. Such interference can occur over long distances and/or through reflected light. Welding areas should be shielded from such interference.
- The auto-darkening filter will automatically turn off after a period of inactivity.

FUNCTION OF THE AUTO-DARKENING FILTER

SHADOW (fig.1-2)

The following areas are pre-set:

- Welding Mode: Shade settings 9 to 13

SENSITIVITY (fig.1-1)

- The sensor sensitivity can be adjusted to different welding methods and working conditions.
- For optimal performance, it is recommended to initially set the sensitivity to maximum and then gradually reduce it until the filter responds only to the welding flash and does not trigger falsely due to ambient light (direct sunlight, intense artificial light, nearby welding arcs, etc.).

DELAY (fig.1-3)

- When welding stops, the viewing window automatically switches from dark to light, but with a pre-set delay to compensate for any bright after-glow on the workpiece.
- The delay/response time can be set to "S" (short: 0.1 sec.) or "L" (long: 1.0 sec.) as desired using the continuously adjustable knob on the back of the auto-darkening filter.
- A shorter delay is recommended for spot welding, while a longer delay is suitable for high-current applications.
- Longer delays can also be used for low-current TIG welding and TIG/MIG/MAG pulse welding.

GRINDING MODE (Fig. 1-7)

- This mode is intended for grinding or other non-welding activities.
- When the auto-darkening filter is locked in the light state (shade 3), the LED under the symbol will blink every 3 seconds to alert the user.
- The filter must be adjusted to an appropriate shade before performing arc welding.

MIX MODE (FIG. 1-4)

This mode is applicable for spot welding and high-current welding. It helps reduce eye strain caused by abrupt changes in shade. The MIX mode consists of 3 periods:

- The delay from the dark state to the intermediate shade number;
- The shade gradient phase;
- The delay from the intermediate shade number to the light state.

A shorter delay is recommended for fast spot welding, while a longer delay is more effective for high-current welding.

ADJUSTMENTS OF THE DARKENING FILTER

SELECTING SHADE LEVEL

Refer to the shade table on the last page to determine the correct dark shade setting for your application. Turn the shade adjustment knob to the required shade number.

SETTING SENSITIVITY

Use the continuously adjustable knob on the back of the auto-darkening filter to set the desired sensitivity level.

SELECTING DELAY TIME

Use the continuously adjustable knob on the back of the auto-darkening filter to set the desired delay time.

CHANGING MODE

- Grinding: There are two ways to activate GRIND mode. You can either long-press the TEST/GRIND button for 2 seconds or long-press the button (Fig. 2) for 2 seconds to switch the filter to GRIND mode. The LED (Fig. 1-5) will flash green every 3 seconds, indicating that you are now in GRIND mode.
- Mix: Turn the DELAY KNOB to 'M' (see Fig. 1-4).

ADJUSTING THE FIT OF THE HELMET

- The circumference of the headband can be adjusted by turning the knob at the back of the headband (see adjustment "Y" in Fig. 3).
- This should be done while wearing the helmet to ensure proper tension, keeping the helmet securely on your head without being too tight.

- If the headband is positioned too high or too low on your head, adjust the band that runs over the top of your head.
- To do this, release the end of the band by pushing the locking pin out of the hole in the band. Slide the two sections of the band to a larger or smaller width as needed and push the locking pin through the nearest hole (see adjustment “W” in Fig. 3).
- Test the fit of the headband by lifting and lowering the helmet a few times while wearing it.
- If the headband shifts when tilting, readjust it until it is stable.

ADJUSTING THE DISTANCE BETWEEN THE HELMET AND THE FACE

- Step 1: Loosen the locking nut (see “T” in FIG. 3) to adjust the distance between the helmet and your face in the downward position.
- Step 2: Loosen the locking nut on both sides of the helmet and slide the helmet closer to or further from your face (see adjustment “Z” in FIG. 3). It is important that your eyes are equidistant from the lens to ensure even shading.
- Step 3: Tighten the locking nut again once the adjustment is complete.

ADJUSTING THE VIEWING ANGLE POSITION

See fig.4.

You are now ready to use the helmet. The shading can be adjusted during use by resetting the potentiometer.

ENG

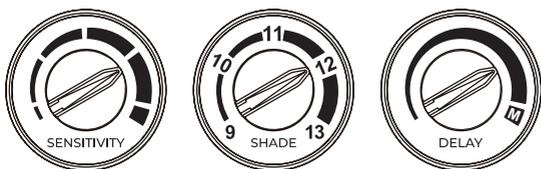


FIG. 1

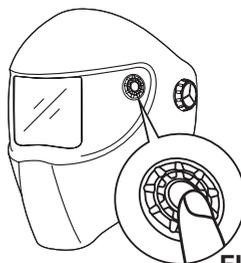


FIG. 2

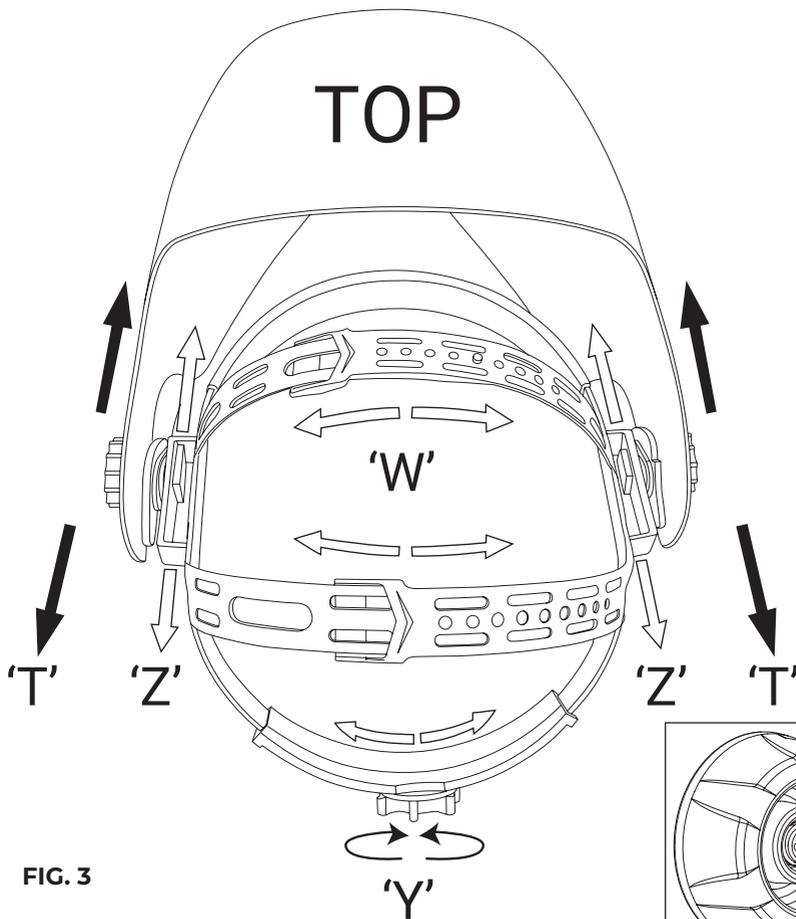


FIG. 3

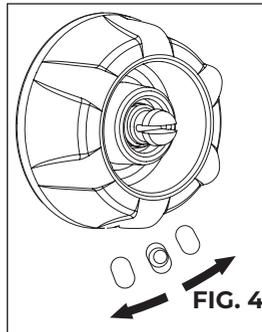


FIG. 4

SHADOW GUIDE TABLE

	WELDING TECHNIQUE							
	PAW	PAC	SAW	MAG/ CO2	TIG/ GTAW	MIG (light)	MIG (heavy)	SMAW
0.5 —								
1 —								
2.5 —								
5 —								
10 —	8							
15 —	9				9			
20 —	10							
30 —	11				10			9
40 —	12							
60 —		11		10	11			10
80 —						10	10	
100 —				11				11
125 —	13		10	12	12	11	11	
150 —		12						
175 —			11			12		
200 —				13	13		12	
225 —			12					12
250 —	14					13		
275 —		13	13					
300 —				14			13	
350 —			14		14	14		13
400 —								
450 —			15	15				
500 —	15					15	14	14

Meaning of Abbreviations:

- SMAW: Shielded Metal Arc Welding
- TIG, GTAW: Tungsten Inert Gas
- MIG (zwaar): MIG on heavy metals
- MIG (licht): MIG on light alloys
- PAW: Plasma Arc Welding
- PAC: Plasma Arc Cutting
- SAW: Submerged Arc Welding
- MAG/CO2: Metal Active Gas

5. Maintenance

REPLACING THE FRONT LENS

To replace the front lens, remove the lens cassette by loosening the locking latch beneath the cartridge (see fig.5), lift the cartridge to remove/replace the front lens.

REPLACING THE INNER LENS

Replace the inner lens if it is damaged. Place your fingernail in the slot beneath the cartridge window and pry the window up until it detaches from the edges of the window.

REPLACING THE DARKENING FILTER

Remove the holder from the helmet shell. See fig. 5 for removal. Bend the top end of the holder to remove the cartridge from the frame. Install the new cartridge into the frame as shown in fig. 6. Ensure that the cartridge is correctly placed in the holder as shown. Reinstall the holder into the helmet shell.

REPLACING BATTERIES

Slide the battery holder out of the auto-darkening filter (remove the used battery when replacing it), place a new CR2450 battery in the battery holder, and slide the battery holder back into the auto-darkening filter (fig. 7). Ensure that the battery's positive and negative terminals are correctly positioned.

CLEANING

Clean the helmet by wiping it with a soft cloth. Regularly clean the surfaces of the auto-darkening filter. Do not use strong cleaning solutions. Clean the sensors and solar cells with denatured alcohol and a clean cloth, and dry them with a lint-free cloth.

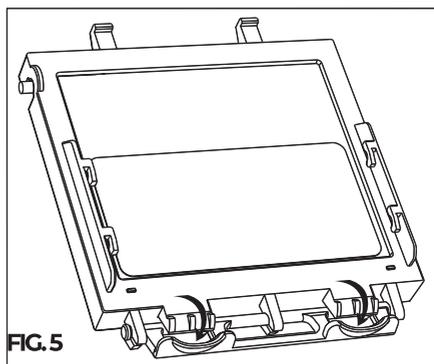


FIG. 5

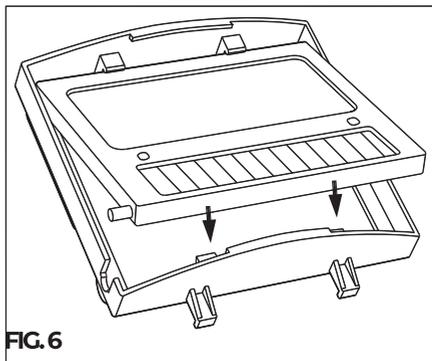


FIG. 6

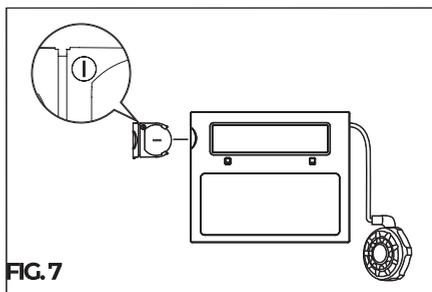


FIG. 7

COMMON PROBLEMS AND SOLUTIONS**Irregular darkening or dimming:**

- The headband may be unevenly adjusted, causing an uneven distance between the eyes and the filter lens.
- Readjust the headband to minimize the difference.

The auto-darkening filter does not darken or flickers:

- The front cover of the lens is dirty or damaged (Replace the lens cover).
- The sensors are dirty (Clean the surface of the sensors).
- The welding current is too low (Increase the sensitivity setting).

Slow response:

- The operating temperature is too low (Do not use at temperatures below -10°C).

Poor visibility:

- The front/inner cover of the lens and/or the filter is dirty (Replace the lens).
- There is insufficient ambient light.
- The shade number is incorrectly set (Reset the shade number).
- Check if the protective film on the front cover has been removed.

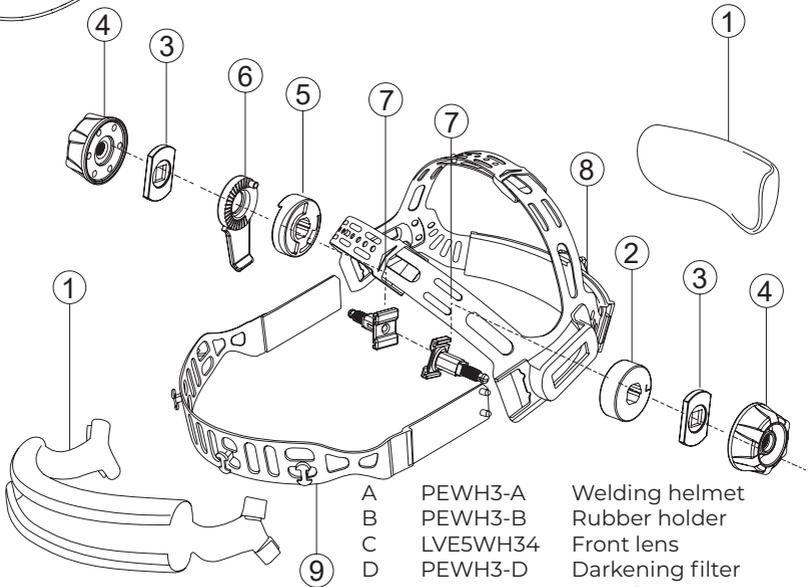
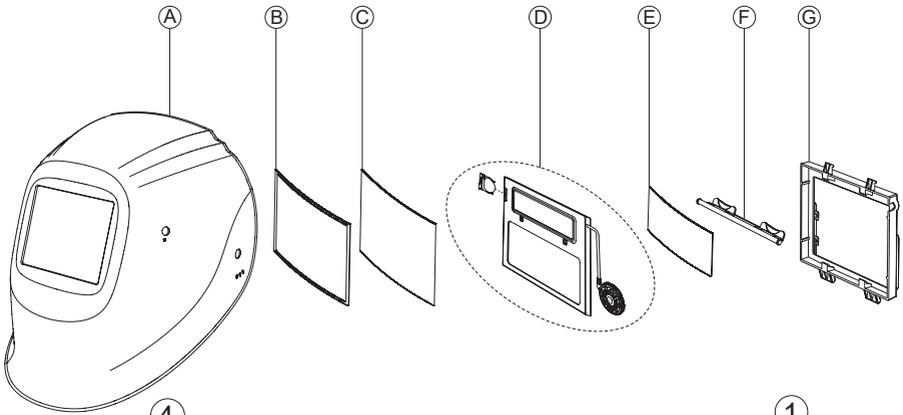
Welding helmet slides off:

- The headband is not properly adjusted (Readjust the headband).

6. Specifications

Viewing Area	98 x 44 mm (3,78" x 1,73")
Cartridge Size	110 x 90 x 9 mm (4,33" x 3,54" x 0,35")
Optical Class	1/1/1/2
Number of Sensors	2
On/Off	Automatic On / Off
Battery Type	Solar cell. Replaceable battery 1 x CR2450 lithium battery
Dark Shade(s)	9-13
Light State	Shade 3.0
Switching Speed	1/16,000 s (55°C)
Special Mode(s)	GRIND / MIX
Sensitivity Adjustment	Low - High, infinitely adjustable knob
Delay	0.1~1.0 s with infinitely adjustable knob
UV / IR Protection	Up to maximum Shade DIN16 always
Operating Temperature	-10°C to 55°C
Storage Temperature	-20°C to 70°C
Helmet Material	High-impact nylon
Approvals / Certifications	CE, ANSI Z87.1, Z94.3, AS/NZS 1338.1

7. Parts



- | | | |
|---|----------|----------------------|
| A | PEWH3-A | Welding helmet |
| B | PEWH3-B | Rubber holder |
| C | LVE5WH34 | Front lens |
| D | PEWH3-D | Darkening filter |
| E | LVI5WH3 | Inner lens |
| F | PEWH3-F | Holder lock |
| G | PEWH3-G | Lens holder |
| 1 | PEWH3-1 | Sweatband |
| 2 | PEWH3-2 | Ring |
| 3 | PEWH3-3 | Ring |
| 4 | PEWH3-4 | Locknut |
| 5 | PEWH3-5 | Limiting ring |
| 6 | PEWH3-6 | Corner limiting ring |
| 7 | PEWH3-7 | Screw |
| 8 | PEWH3-8 | Adjustable headband |
| 9 | PEWH3-9 | Front headband |

8. Warranty

1. The warranty begins on the date specified on the purchase receipt and is valid for 12 months.
2. The warranty is non-transferable without written consent from your supplier.
3. A purchase receipt is required to make any warranty claims.
4. The warranty only applies if the product is used according to the provided instructions and solely for its intended purpose.
5. No modifications may be made to the product.
6. The warranty does not cover misuse.
7. Shipping costs are not covered under the warranty.
8. Repairs must be carried out exclusively by your supplier. Any repairs performed by third parties will void the warranty claim.
9. Repairs during the warranty period do not extend the warranty validity. However, a three-month warranty will be provided for the repair if the original warranty period has expired.
10. Any maintenance tasks described in the user manual must be performed in a timely manner.
11. For warranty claims, you must contact the point of sale where you purchased the item.

EG-verklaring van overeenstemming - Declaration of conformity – EG- Konformitätserklärung - Declaration de conformité - Dichiarazione di conformità- Declaración de conformidad

Wij, We, Wir, Nous, Noi, La empresa,

Valkenpower BV, Industrieweg 4, 6051 AE Maasbracht, Nederland,

verklaren geheel onder eigen verantwoordelijkheid dat het product

declare under our sole responsibility that the product

erklären in alleiniger Verantwortung, dass das Produkt

déclarons sous notre seule responsabilité que le produit

dichiariamo sotto la nostra responsabilità che il prodotto

declaramos bajo nuestra exclusiva responsabilidad que el producto

Type Model Type Type Tipo Tipo	Beschrijving Description Beschreibung Description Descrizione Descripción	Merk Brand Marke Marque Marca Marca
EWH3(C)	Auto. verduisterende lashelm Auto-darkening welding	Soldatech

Waarop deze verklaring betrekking heeft, in overeenstemming zijn met de volgende normen:

To which this declaration relates is in conformity with the following document:

Auf welches sich diese Erklärung bezieht, den folgenden Normen entspricht:

Auquel se réfère cette déclaration est conforme à le document suivant:

A cui si riferisce dichiarazione, corrisponde ai seguenti documenti:

Al que se refiere la presente declaración, corresponde a los siguientes documentos:

Europese Verordening, European Regulation, Europäische Verordnung, Règlement Européen, Regulamento Europeo, Reglamento Europeo:

EU 2016/425

Nederland, Maasbracht, 26-07-2024

Directeur Valkenpower

Serienummer
Serial number:



Valkenpower BV, Industrieweg 4, 6051 AE Maasbracht, Nederland

