Auto-Darkening Filter Welding Helmet

User's Manual





WARNING: Read and understand all instruction before using! Severe personal injury could occur if the user fails to follow the aforementioned warnings, and /or fails to follow the operating instructions.

1. BEFORE WELDING

. Auto-Darkening Filter Welding Helmet comes ready for use. The only thing you need to do before your welding is to adjust the position of the headband and select the correct shade number for your application.

. Check the front cover lens to make sure that they are clean, and that no dirt is covering the four sensors on the front of filter cartridge. Also check the front/inside cover lens and the front lens retaining frame to make sure that they are secure.

. Inspect all operating parts before use for signs of wear or damage. Any scratched cracked, or pitted parts should be replaced immediately before using again to avoid severe personal injury.

. Check for light tightness before each use.

. Select the shade number you require at the turn of a shade knob.

. Adjust headband so that the helmet is seated as low as possible on the head and close to your face. Adjust helmet's angle when in the lowered position by turning the adjustable limitation washer.

2. Magnifying lens

The filter can be assembled with magnifying lens conveniently, please purchase magnifying lens if need.

3. SPECIFICATIONS

Viewing Field: UV/IR Protection: Function:	98x43mm/3.86"x 1.69" Up To Shade DIN16 all time "WELDING"/" GRINDING" can be selective
Light State:	Shade 3 (&3.5)
Variable Shade:From "Shade 4 to shade 8" "shade 9 to shade 13"can be external selective. Please first choose the position of "MODE"switch on filter (three position for choosing), so as to correspond with externalshade adjustment knob's area.	
Reaction Time:	0.000033sec (1/30,000 s)
Delay Time:	Short- Middle-Long (it can vary at 0.3s~0.9s)
Sensitivity:	Outside Can be continued adjustable
Sensors:	Four infrared detector
Power Supply:	Solar cells+ Lithium battery
Power On/Off:	Fully Automatic
Operating Temperature:	-5℃ to + 55℃(23℉ to 131℉)
Storing Temperature:	-20°C~ + 70°C(-4°F to 158°F)
Helmet Material:	High-impact resistant Polyamide(Nylon) DIN EN 175 B CE
Total Weight:	480g

. The product is in full conformity with related DIN EN 379, DIN EN 175 safety standards and ANSI/ ISEA Z87.1-2015 safety standards.

. Before welding, please keep clean on filter, front cover lens, inside cover lens and four optical sensors. If front cover lens and inside cover lens are blurry and cannot be clean, please replace them immediately. 4. Grinding Control/Variable Shade Control / Sensitivity Control /Delay Control/Test Button



Welding/Grinding Switch: when grinding, please choose Grinding switch. For other body parts helmet can not protect, please wear other safety products for protection.

When welding, the MODE switch has two position. When the switch is turned into the position of 9-13, the shade knob adjustment area is during shade 9-shade 13. When the switch is turned into the position of 4-8, the shade knob adjustment area is during shade 4 - shade 8.

2)Shade Knob- before welding. Please adjust the shade knob to correspond the shade mode switch, so as to choose a proper shade no.(shade 4-13) based on welding process and welding amperage. If the shade of filter is too darkening or too light, please adjust the Shade Knob slightly to correct position till the eyes can see the welding spot which is not glaring and can see welding molten pool.

Please kindly note that it will damage the eyes if using welding helmet under

incorrect shade no.(too darkening or too light) for a long time.

3) Sensitivity Knob: Before welding, please adjust the sensitivity to high position, if encountering the interference of Lighting lamp(the filter is darkening while not welding), please adjust the sensitivity towards low position slightly until the filter returns to light state (please don't make the helmet towards to light lamp source during this process, should towards to welding workpiece). During welding, the sensitivity knob should be adjusted as high as possible, or it will affect the darkening speed of filter. Attention: Operator must stop using the helmet immediately and contact with the dealer in time if the filter can not be darkening or the darkening speed is slow or the filter is flash.

Attention: If the filter can not be darkening or the darkening shade is not enough or the darkening speed is slow or the filter is flash, for such abnormal work, please find the reason immediately. If operator can not solve the problem, please must stop using the helmet immediately and contact with dealer in time.

4) Delay time Knob -- It can adjust the switching time of filter from dark state to light state, avoid the damage to eyes from the residual arc of welding molten pool due to too fast switching time to light state when welding is end (Break arc). The delay time vary from 0.3s to 0.9s. The switching time may vary due to different welding types and different sensitivity setting even delay time handle is at the same position. If the filter is flash under low current welding, please adjust the delay time handle to long position, this can help to solve this problem.

5) Test button

It can test if the lithium battery is with power and if the filter is under normal work. If the battery indicator is lightening (red) and the filter can be darkening when pressing down test button, it means the filter is under normal work. If the battery indicator is not lightening or the light is very weak, please replace the lithium batteries, the type of battery is CR2450, QTY of battery is 1pc. If the battery indicator is lightening but the filter is not darkening, it means there is some problem with the filter, please don't use this filter anymore.



5. ADJUSTING HEADGEAR

1) Top head band To move the Head Band in the direction of arrow (as picture) to adjust the depth of headband. According to user's head shape adjust to a suitable position.

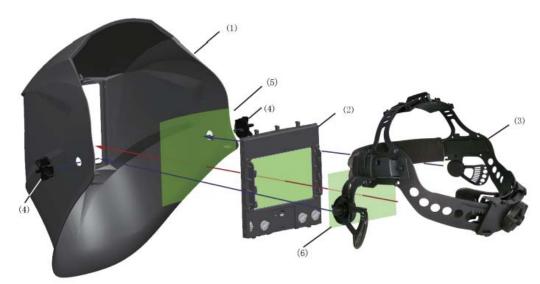
2) Distance of Harness from filter lens To adjust the distance from the welder's eyes to filter lens (left-right Symmetrical adjustment).

3) Back of headband To adjust the size of headband (loose or tighten).

4) Incline angle adjustment To adjust the incline angle of helmet relative to the welder's face, and adjust the height of welder's eyes relative to filter lens.

This model is designed & equipped with a special turnover (up & down) headband mechanism. When welder turns over the helmet to welder's head top, the headband mechanism makes helmet's gravity center to be more lower, and be coincided with the center of welder's head. The design of welding helmet greatly lowers the fatigue of welder's head (& neck) and make welder feel more comfortable than before while at working.

. Headband has been set unevenly and there is an uneven distance from the eyes to the filter's lens (Reset headband to reduce the difference to filter.



6. SPARE PARTS LIST

Item 1: Helmet shell
Item 3:Complete headband
Item 5: Front cover lens

Item 2: Auto darkening filter Item 4: Headband knob Item 6: Inside cover lens



- 7) Sweatband (cloth), 8) headband top pad, 9) front headband, 10) headband back pad
 11) Headband regulator assembly (release –tighten) 12) Left band& Right band
 13)Angle adjusting shim (left) & Angle adjusting shim (right)
- 14) Headband fixing screw x2 15) Headband rack (left) & Headband rack (right)