



Auto-darkening Welding Filter AW7/AW7R *User's Instruction*

< Description >

This auto-darkening liquid crystal welding filter (ADF) is designed to protect welders from harmful visible lights, ultraviolet (UV) and infrared radiation (IR) during the operations such as arc welding, gas welding or gas cutting. The ADF will automatically change from a light state (shade 4) to a dark state (shade 5, 7, 8, 9, 10, 11 or 12) when it detects the strong light produced by welding, and automatically returns to a light state when the welding work stops. In either light state or dark state, the ADF can provide complete UV and IR protection. The ADF comprises four optical sensors to detect the strong light produced by welding.

< Specifications >

ADF Size	133 x 114 x 10 mm
LCD Viewing Area	94 x 43 mm
Optical Sensors	4
Light State	Shade 4
Dark States	Group 1 : Shade 5,7 Group 2 : Shade 8, 9,10,11,12
Sensitivity Modes	5 levels of sensitivity for adjustment
Delay Control	1-step delay : 0.1, 0.2, 0.3, or 0.4 sec. 2-step delay : 0.1 + 2, 0.3 + 2, or 0.5 + 2 sec.
Operating Temperature	-5°C to 55°C
Storage Temperature	-20°C to 70°C
Power Supply	AW7:CR2450 battery (2 required) AW7R:Rechargeable battery (micro USB)
Automatic Power Off	10 minutes
Low Battery Indicator	Flashing LED
Standard Compliance	CE EN379, ANSI Z87.1, CSA Z94.3
Helmet Material	PP
Headband Material	PP
Cover Lens	PC
Sweatband	Polyester fiber
Total Weight	586 ± 20g
Standards and Markings	EN 379
	4/5&7/8-12 BLUE EAGLE 1/1/1/2/397 CE
	ANSI Z87.1
	BLUE EAGLE Z87 W4/W5&W7/W8-W12
CSA Z94.3	
BLUE EAGLE 4/5&7/8-12	

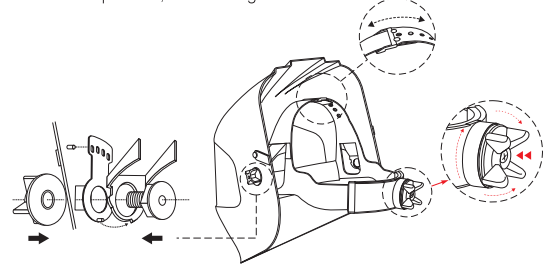
< Headgear Adjustment >

■ Head Size Adjustment

Headgear tightness can be adjusted by the knob on the back of the headgear. Turn left to loosen and turn right to tighten, as shown in the figure below.

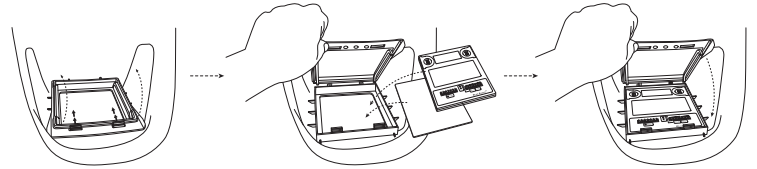
■ Angle Adjustment

There is a 4-hole buckle on both left and right sides of the headgear, as shown in the figure below. The wearer can adjust the tilt angle of the headgear by threading the protruding pins on both sides of the headgear into different holes on the buckles. There are four angles for adjustment. If adjustments are needed, please loosen the outer knob, adjust the 4-hole buckle to the desired position, and then tighten the knob.



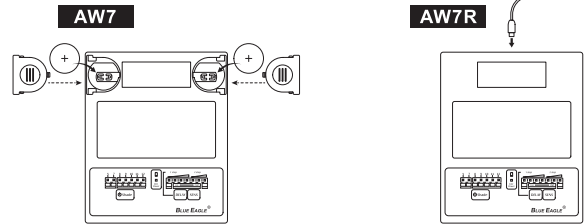
< Replacing ADF and /or Cover Lens >

■ The ADF or cover lens shall be replaced according to the following graphic illustration.

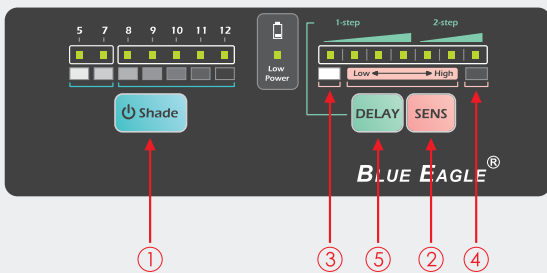


< Replacing Batteries >

■ If the Low Battery Indicator is flashing, it means that the battery is low and shall be replaced or recharged immediately.



< Operation >



① On / Off

Press the Shade button to turn ON the ADF, which will darken and then return to the light state.
* Press the Shade button to activate the filter and confirm whether it functions normally before each use. The ADF will automatically turn OFF after 10 minutes of inactivity. However, if the filter is on the Light-State Lock or Dark-State Lock mode, it will not automatically turn OFF.

① Shade

Press the Shade button and the LED indicator of the current shade will flash. To select other shades, please keep pressing the Shade button until the LED indicator stops at the desired shade. To shift between the two shade groups (shade 5, 7 and shade 8, 9, 10, 11, 12), please hold the Shade button down for 2 seconds.

② Sensitivity

To change the sensitivity settings of the optical sensor, please press SENS button to select the desired sensitivity. There are 5 sensitivity levels from low to high, as shown on the panel . If the ADF does not darken automatically during welding, please increase the sensitivity level until the optical sensor detects stably.

③ Light-State Lock

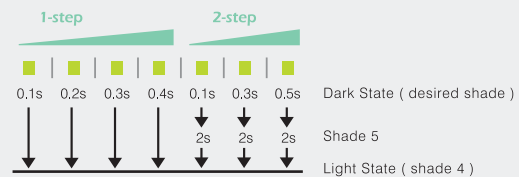
Press SENS button until the LED indicator moves to the icon marked by the arrow and the ADF is locked in the light state.

④ Dark-State Lock

Press SENS button until the LED indicator moves to the icon marked by the arrow and the ADF is locked in the dark state.

⑤ Delay

Setting a proper delay can help protect the welder from the harms of residual radiation immediately after welding. Please press the DELAY button to select proper delay. The delay is divided into 2 modes, i.e. 1-step and 2-step, and the corresponding time is as follows:



< Cleaning and Storage >

- Please clean the helmet by neutral soap water and a piece of clean cloth.
- Clean the auto-darkening filter with a piece of dry, soft and lint-free cloth.
- DO NOT immerse the product in water.
- DO NOT use a solvent to clean.
- Please store it in a dry indoor environment away from direct sunlight.

< Packing / Transportation >

Please put the ADF into a carton or box with suitable cushion to prevent damage caused by the vibration when transporting.

< Warning >

Always check whether the ADF functions normally before each use. DO NOT use it if the ADF is out of order or does not work normally. DO NOT use this ADF in any kind of laser welding process. DO NOT modify the ADF. The ADF only provides limited impact protection and is not unbreakable. If the ADF has experienced severe impact, it may deform or break, causing harm to the wearer. The ADF has passed the fire-resistance test (according to EN 175), but it still may burn or melt as the result of direct exposed to flame.