UNIMIG

BUILT FOR WELDERS

RWX 8000

UNIMIG 2 YEAR WARRANTY

UMCWH

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SAFETY

Please read and understand all instructions before using.

- Be sure that the dark shade of the lens in the welding helmet is on the correct shade number for your application.
- The helmet 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 ANSI specifications, must be worn at all times when using this welding helmet.
- Avoid work positions that could expose unprotected areas of the body to sparks, spatter, direct and/or reflected radiation. Use appropriate protection if exposure cannot be avoided.
- 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. Unauthorised 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 check the helmet is in Weld Mode and not Grind Mode. If the issue persists, contact your local UNIMIG Service Department.
- Do not immerse this lens in water.
- Do not use any solvents on any lens or helmet components.
- The recommended operating temperature range for this welding lens is -10°C to 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.

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FEATURES

The RWX8000 Welding Helmet is equipped with an automatic darkening filter. The filter is transparent before welding so that the operator may observe the work surface clearly. When striking the arc, the filter darkens automatically immediately. When the arc goes out, the filter will become transparent again. The switching time from light to dark is 0.08 ms. The switching time from dark to light may be set up within 0.1-0.9 second.

The helmet is equipped with a continuous darkness-adjusting unit so that the operator may select an arbitrary dark shade number ranging from 5-9 or 9-13. The helmet also features 3 memory states to save desired settings.

The RWX8000 Welding Helmet gives the operator permanent complete protection against UV/IR, even in the transparent state. The UV/IR protection level is up to DIN15. The power is provided by solar cells and a replaceable battery.

The helmet is equipped with four photosensors to sense arc light. In addition, the helmet contains an outer protection shell made of high polymer materials. The plate is wear-resistant, thermostable, and has no dregs-sticking, giving a very long service life.

The RWX8000 Welding Helmet is a TRUE COLOUR VIEW welding helmet. With advanced TRUE COLOUR VIEW technology, the users can weld with improved clarity due to new Blue Optical Coating technology, grind with precision while in grind mode and finally see the job performance in the light state in the full spectrum of colours. There is now no need to remove the helmet to see clearly!

TECHNICAL DATA	
SKU	UMCWH
Filter Dimensions	114 x 133 x 9.5 mm
View Size	100 x 83.4 mm
Classification	1/1/1/1
Light State	4
Dark State	5-9 / 9-13
UV/IR Protection	DIN15
Time from Light to Dark	0.08ms
Time from Dark to Light	0.1-0.9s

TECHNICAL DATA	
Sensitivity Delay	Adjustable (1-5 for low-high)
Power Supply	Solar Cells & CR2450 Replaceable Battery
Warranty	2 Years
Operating Temperature	-10˚C to 65˚C
Storage Temperature	-20˚C to 85˚C
Shade Control	Yes
Grind Mode	Yes
Standards	CE EN379, ANSI Z87.1, CSA Z94.3,

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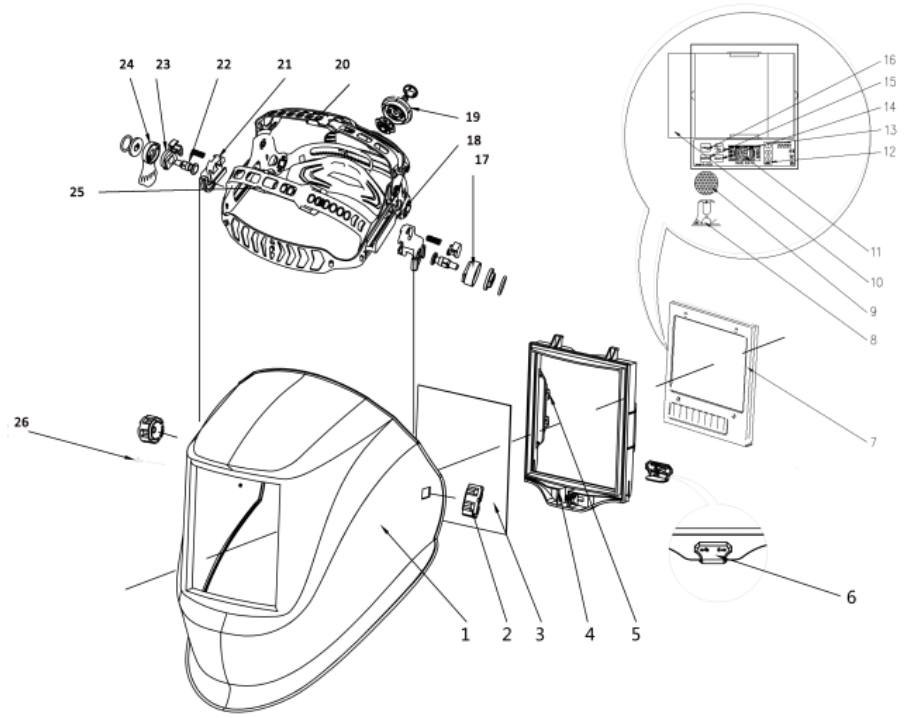
HELMET BREAKDOWN



#	Description	#	Description
1	Helmet shell	14	Delay button
2	Headgear screw	15	Sensitivity button
3	Outer protection lens	16	Shade button
4	ADF cradle	17	Block washer(on left)
5	Magnifying lens holder	18	Headgear slider (with 5 slots)
6	Cradle lock	19	Headband tightness adjusting knob
7	Auto filter	20	Headband adjustment(back and forth)
8	Battery holder	21	Block washer adjustment(up and down)
9	Battery	22	Headband screw(long, on right)
10	Inner protection lens	23	Block washer (on right)
11	ADF setting panel	24	Segmental positioning plate (on right)
12	Memory buttons(3)	25	Headband adjusting buttons
13	Weld/Grind button	26	Positioning point for the segmental plate

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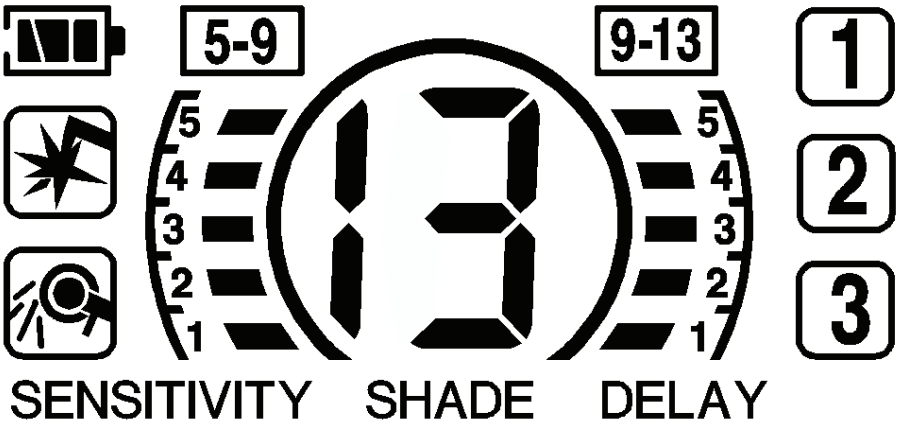
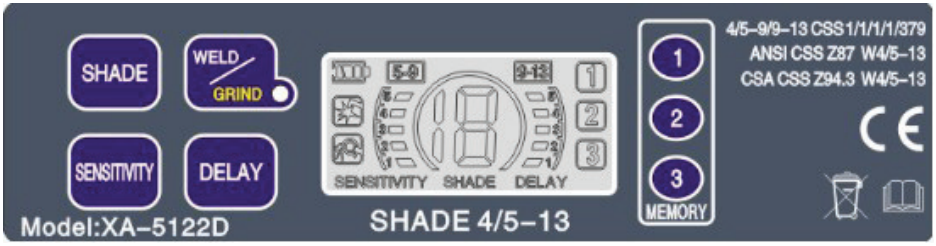
FILTER DISPLAY ICONS



1. Battery Status	2. Welding Indication	3. Grinding Indication	4. Shade Range 5-9	5. Shade Range 9-13
SENSITIVITY	DELAY	SHADE		
6. Sensitivity indication: 1 (low) to 5(high)	7. Delay indication: 1 (short 0.1s) to 5 (long 0.9s)	8. Shade reading	9. Memory selection	



Note: Buttons on the left of the screen need to be pressed twice to start any settings. Otherwise they will not operate.

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VARIABLE SHADE CONTROL

- If the Shade is in the range of **5-9**, press **WELD/GRIND** button (13) repeatedly until both *Icon 2* and *Icon 4* appears on the screen. Then press **SHADE** button (16) repeatedly until the desired Shade shown in *Icon 8*.
- If the Shade is in the range of **9-13**, press **WELD/GRIND** button (13) repeatedly until both *Icon 2* and *Icon 5* appears on the screen. Then press **SHADE** button (16) repeatedly until the desired Shade shown in *Icon 8*.

Note:

- Choose an optimum Shade number for the required welding process or application.
- If this lens does not darken when striking arc, stop welding immediately and check the helmet is in Weld Mode and not Grind Mode. If the issue persists, contact your local UNIMIG Service Department.

SENSITIVITY CONTROL

The responsiveness to different light levels in various welding processes can be adjusted in the range 1-5(from low to high).

Press the **SENSITIVITY** button (15) twice to start the setting, *Icon 6* will flash on the screen (from 1 to 5). Repeatedly press the **SENSITIVITY** button until the desired level shown in *Icon 6*.

- **Turn to 1 (low)**: The photosensitivity changes to be lower.
  - Suitable for high amperage welding and welding in bright light conditions (lamp light or sunlight).
- **Turn to 5 (high)**: The photosensitivity changes to be higher.
  - Suitable for low amperage welding and using in poor light conditions.
  - Suitable for use with steady arc process such as TIG welding.
  - Under normal use, a higher sensitivity setting is recommended.

DELAY CONTROL

The length of time delay for the ADF to return to the light state after welding can be adjusted in the range 1-5 (for 0.1-0.9s). The time delay is for protection of the welder's eyes from strong residual rays after welding.

Press the **DELAY** button (14) twice to start the setting, *Icon 7* will flash on the screen (from 1 to 5). Repeatedly press the **DELAY** button until the desired length of time delay shown in *Icon 7*.

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- **Turn to 1 (0.1s)**: The time the ADF takes to lighten after welding becomes shorter. The shortest time is about 0.1s depending on the welding point temperature and shade setting. This setting is ideal for track welding or production welding with short welds.
- **Turn to 5 (0.9s)**: The time the ADF takes to lighten after welding becomes longer. The longest time is about 0.9s depending on the welding point temperature and shade setting. This setting is ideal for welding at high amperage where there is an afterglow from the weld.

GRIND SELECTION

Press **WELD/GRIND** button (13) repeatedly until *Icon 3* appears on the screen and the red light on the button flashes. Additionally, *Icon 8* will show shade 4.

Note: Do not weld in the Grind mode, the ADF will not darken.

MEMORY SETTING

The three most frequently used settings can be stored and reactivated easily by using the **3 MEMORY** buttons (12) on the right side of the screen.

Upon use of this helmet, the last ADF settings will be stored automatically (stored about 5 minutes after). The next time when you start to weld, the last settings will be automatically re-activated.

- If you want to store a complete welding setting, press and hold one of the memory buttons and release when the *Icon 9* stops flashing.
- To activate the stored memory, press the memory button.

Note: Only in welding mode you can activate the memory. Change to welding mode if you are currently using the grinding function.

HEADGEAR ADJUSTMENTS

The harness can be adjusted for better comfort during operation. There are 5 different parameters that can be adjusted:

1. Select eye level by Headband adjusting buttons (25).

2. Select view angle by Segmental positioning plate (24).

3. Adjust head size perimeter by pushing and turning the Headband tightness adjusting knob (19).

4. Select eyes distance from ADF by adjusting Headgear screws to 1 of the 5 slots on the Headgear slider (18). Make sure both sides are equally positioned for proper vision.

5. Select the height of the headgear by adjusting the Block washers(17,23) up or down on the Block washer adjustment(21).

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OPERATING INSTRUCTIONS

BATTERY INDICATOR

Icon 1 indicates battery status. Replace the battery when it is low; otherwise, the ADF switching time will become slower, and shade accuracy will be compromised.

POWER SUPPLY AND REPLACING THE BATTERY

The power of the auto-darkening helmet is provided by solar cells and a CR2450 lithium battery. To change the battery, open the Battery holder (8) at the side of the ADF and replace the battery (9).

ADDITIONAL INSTRUCTIONS

- Be sure that the helmet is used in the correct condition and according to the SAFETY content.
- There is a liquid crystal-valve in the filter, although it has inner and outer protection plate, it is important to avoid heavy knocks to the helmet.
- The outer protective shell of the helmet should be periodically inspected and cleaned. In the case of a break, crack, pitting or other damage, the helmet shell must be replaced.
- To operate more efficiently and safely, please select the correct dark shade number.
- The arc light must be visible completely by the sensor. If not, the filter will be transparent or unstable in darkness.
- Please use the automatic filter at a temperature between -10°C-65°C (14°F-149°F)
- Do not disassemble the filter. If any problems arise, please contact your local UNIMIG service department.

REPLACEABLE PARTS

- Outer Lens - UMRBOP
- Inner Lens - UMRWXIP
- Harness - UM-H-H1
- Sweat Band - UMSB

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TROUBLESHOOTING

PROBLEM	SOLUTION
The ADF does not darken when welding	• Stop welding or cutting immediately. • Make sure the sensors are facing the arc and there are no obstructions. • Check the mode 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	• Adjust the sensitivity to a lower level. • If the work-site is too bright, it is recommended to reduce the surrounding light level.
The ADF switches during the welding	• Increase the sensitivity if possible. • Make sure the sensors are facing the arc and there are no obstructions. • Increase Delay 0.1 – 0.3 seconds may also reduce switching.
Inconsistent shade number on the corner of ADF	• It is a natural feature and will not be dangerous for the eyes. • To get maximum comfort, try to keep a view angle at around 90°.

WARRANTY

UNIMIG auto-darkening welding helmets are covered for warranty for up to two years from the date of purchase. The duration of use depends on various factors such as use, cleaning storage and maintenance. Frequent inspections are recommended.

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NOTES

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RECOMMENDED SHADE SETTINGS

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Current Amperes

	0.5	1	2.5	5	10	15	20	30	40	50	60	100	125	150	175	200	225	250	275	300	350	400	450	500	
Covered Electrode	Shade 9									Shade 10		Shade 11				Shade 12					Shade 13				14
MIG Plate Welding	Shade 10												Shade 11			Shade 12					Shade 13				14
MIG Sheet Metal	Shade 10												Shade 11			Shade 12			Shade 13			Shade 14			15
TIG	Shade 9							Shade 10		Shade 11			Shade 12			Shade 13			Shade 14						
MAG	Shade 10											Shade 11		Shade 12		Shade 13					Shade 14			Shade 15	
Arc Gouging	Shade 10															Shade 11		Shade 12		Shade 13		Shade 14		Shade 15	
Plasma Cutting	Shade 11														Shade 12				Shade 13						
Plasma Welding	4	5	6	7	8	9	Shade 10		Shade 11		Shade 12			Shade 13				Shade 14						Shade 15	

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