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Miller 287803

Miller 287803 Classic Series VS Auto-Darkening Welding Helmet User Manual

Model: 287803

1. Introduction

This manual provides essential instructions for the safe and effective use, setup, operation, and maintenance of your Miller 287803 Classic Series VS Auto-Darkening Welding Helmet. Please read this manual thoroughly before using the helmet to ensure proper function and safety.

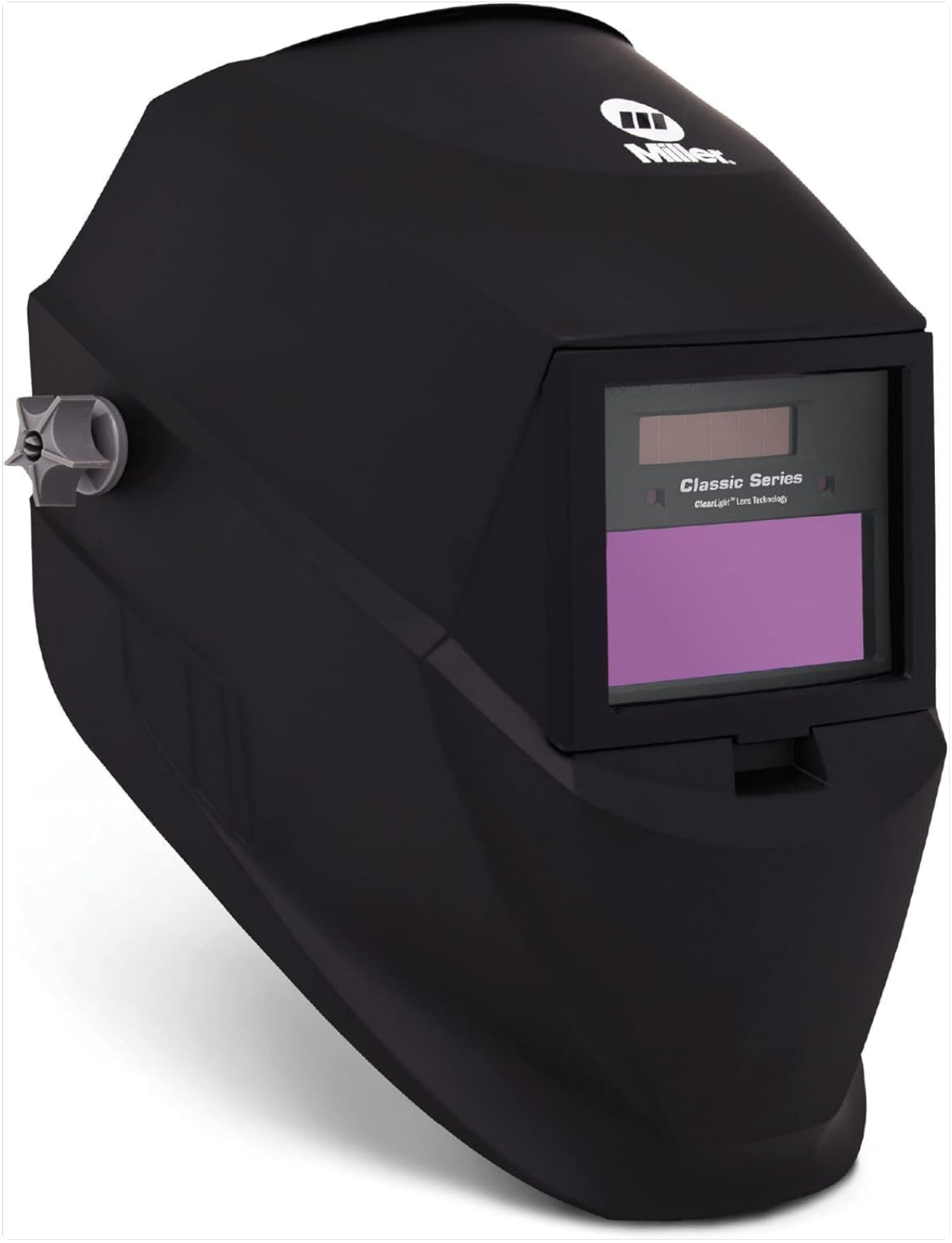

Figure 1: Miller Classic Series VS Auto-Darkening Welding Helmet.

The Miller Classic Series VS Welding Helmet is designed to provide eye and face protection during welding, cutting, and grinding operations. It features high-definition optics, an auto-darkening filter, and adjustable settings for various applications.

2. Safety Information

WARNING: Failure to read, understand, and follow all instructions can result in serious injury or death.

- Always wear appropriate personal protective equipment (PPE) in addition to the welding helmet.

- Ensure the helmet is properly fitted and adjusted before each use.
- Do not use the helmet if any part is damaged or defective. Replace damaged parts immediately.
- The auto-darkening filter (ADF) may not darken if the sensors are obstructed or if the battery is low. Always check the ADF function before welding.
- This helmet is not suitable for laser welding or overhead welding applications.
- Meets ANSI Z87.1+ and CSA standards for safety.

3. Setup and Adjustment

3.1 Headgear Adjustment

The helmet features a ratchet-style headgear for precise control and comfort. Adjust the headgear to fit snugly and securely on your head, ensuring the helmet is balanced and the viewing area is correctly positioned in front of your eyes.

1. Loosen the tension knobs on the sides of the helmet to adjust the tilt and distance from your face.
2. Use the ratchet knob at the back of the headgear to adjust the circumference for a secure fit.
3. Adjust the top strap to control the helmet's height on your head.

3.2 Powering the Auto-Darkening Filter

The auto-darkening filter is powered by a rechargeable solar cell and includes an auto-on power control. No manual battery installation is typically required for initial use, as the solar cell charges the internal battery.

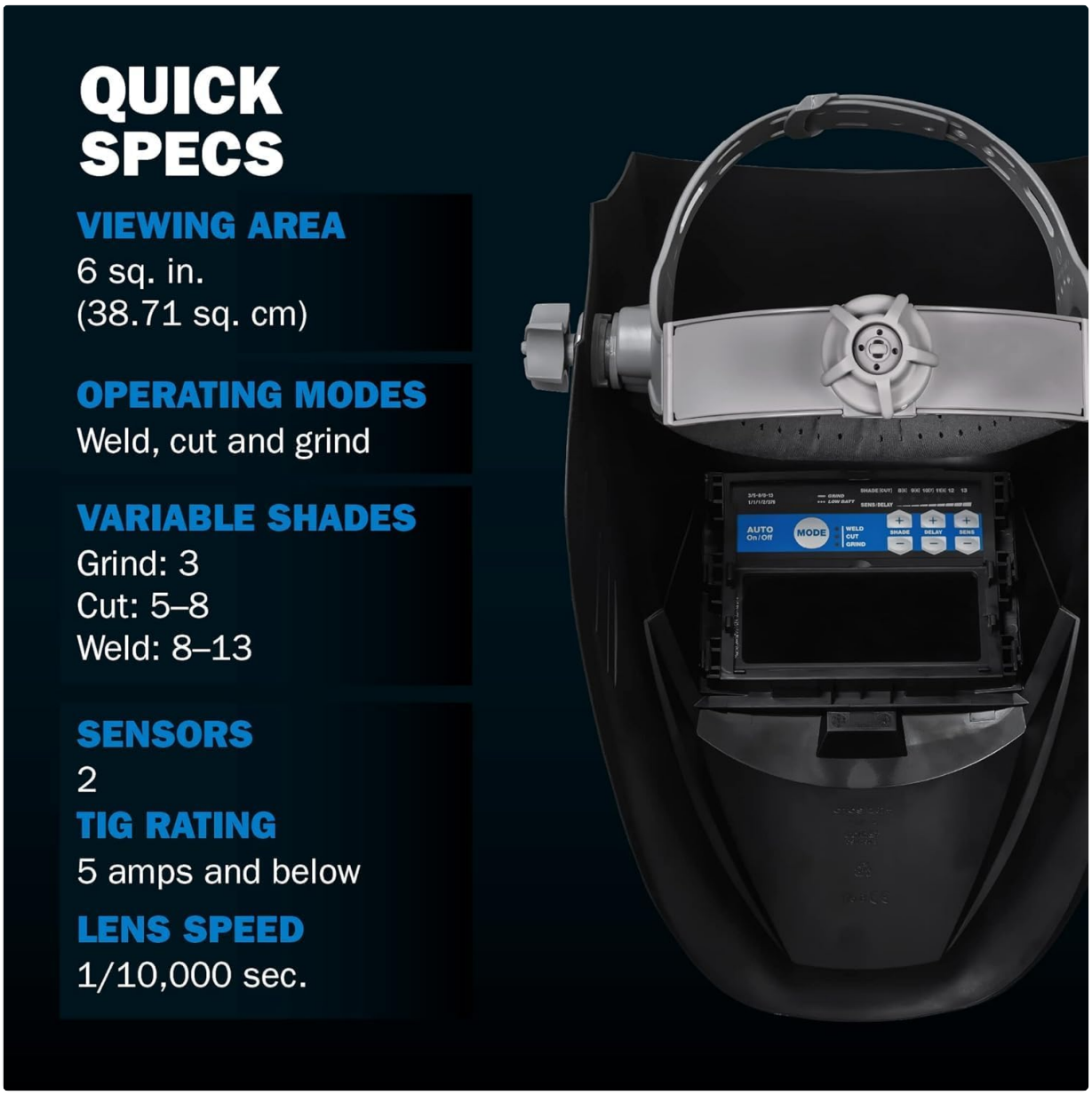

Figure 2: Quick Specifications and Internal Controls.

4. Operating Instructions

The Miller Classic Series VS helmet offers multiple operating modes and adjustable settings for optimal performance.

4.1 Operating Modes

- **Weld Mode:** For arc welding processes. Offers variable shades 8-13.
- **Cut Mode:** For plasma cutting and similar applications. Offers variable shades 5-8.
- **Grind Mode:** For grinding operations. Provides a light shade of 3, allowing the operator to keep the hood down for non-welding tasks.

4.2 Adjusting Shade, Sensitivity, and Delay

Digital controls allow for customization of the auto-darkening filter settings.

1. **Shade Adjustment:** Use the "+" and "-" buttons to select the appropriate shade level (8-13 for welding, 5-8 for cutting, 3 for grinding). Refer to welding process guidelines for recommended shade levels.

2. **Sensitivity Adjustment:** Adjust the sensitivity to control how easily the lens reacts to the welding arc. Higher sensitivity is suitable for low amperage TIG welding or when the arc is partially obstructed.
3. **Delay Adjustment:** Controls the time the lens remains dark after the arc extinguishes. A longer delay is useful for high amperage welding or when tack welding to prevent eye fatigue from rapid light changes.

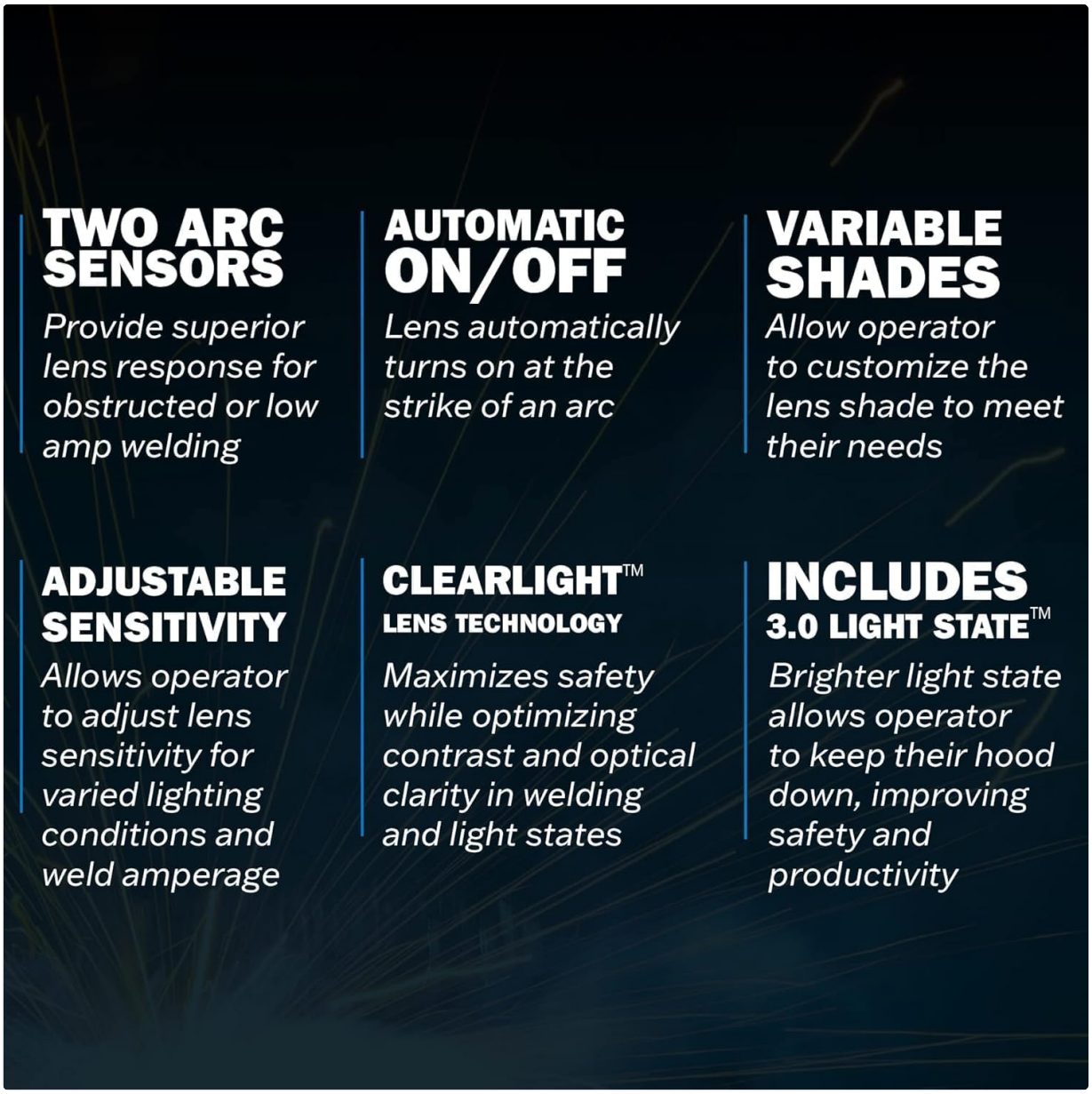

Figure 3: Key Features and Controls.

4.3 ClearLight Lens Technology

This helmet incorporates ClearLight lens technology, which provides high-definition optics for enhanced clarity and natural color recognition, maximizing visibility and performance during welding tasks.

4.4 TIG Rating

The helmet has a TIG rating of 5 amps and below, making it suitable for low amperage TIG welding applications.

5. Maintenance

5.1 Cleaning the Helmet

- Clean the helmet shell with mild soap and water. Avoid harsh solvents.
- Clean the auto-darkening filter and cover lenses with a soft, clean cloth and a non-abrasive lens cleaner. Do not use abrasive materials or solvents that could scratch or damage the lens.

5.2 Replacing Cover Lenses

Regularly inspect and replace scratched or damaged inner and outer cover lenses to maintain optical clarity and protection. Refer to the helmet's internal instructions for specific lens replacement procedures.

6. Troubleshooting

- **Lens not darkening:**
  - Ensure sensors are not obstructed.
  - Check for sufficient light to activate the solar cell.
  - Verify the helmet is in Weld or Cut mode, not Grind mode.
- **Poor visibility:**
  - Clean cover lenses and ADF.
  - Replace scratched or pitted cover lenses.
  - Adjust sensitivity and delay settings.
- **Helmet feels uncomfortable:**
  - Re-adjust headgear for a balanced and secure fit.
  - Ensure all straps are properly positioned.

7. Specifications

Feature	Specification
Model Number	287803
Optical Clarity Rating	1/1/1/2
Viewing Area	6 sq. inches (38.71 sq. cm)
Operating Modes	Weld, Cut, Grind
Variable Weld Shade	8-13
Variable Cut Shade	5-8
Grind Shade	3
Light State	3.0
Arc Sensors	2 independent sensors
Switching Speed	1/23,000 second
TIG Rating	5 amps / below
Power Source	Rechargeable Solar Cell

Feature	Specification
Construction Material	Nylon
Weight	989 Grams (approx. 2.18 lbs)
Standards Met	ANSI Z87.1+, CSA, CE

8. Warranty and Support

8.1 Warranty Information

The Miller 287803 Classic Series VS Auto-Darkening Welding Helmet is backed by a**3-year warranty**. Please retain your proof of purchase for warranty claims. For detailed warranty terms and conditions, refer to the official Miller website or contact customer support.

8.2 Customer Support

For technical assistance, parts, or service, please contact Miller customer support. Visit the official Miller website for contact information and additional resources.
Note: Not recommended for industrial applications or repetitive tack welding applications.

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