

ANDELI RL-600LB-DBB

ANDELI RL-600LB-DBB Panoramic Welding Helmet User Manual

Model: RL-600LB-DBB

1. INTRODUCTION

This manual provides essential information for the safe and effective use of your ANDELI RL-600LB-DBB Panoramic Welding Helmet. Please read this manual thoroughly before operating the helmet to ensure proper function, safety, and longevity of the product. Keep this manual for future reference.

The ANDELI RL-600LB-DBB welding helmet is designed for professional eye and face protection during various welding and grinding operations, including TIG, MIG, ARC, Cut, and Grind tasks. It features a wide panoramic view, true color technology, and an auto-darkening filter (ADF) powered by solar cells and a rechargeable battery.

2. SAFETY PRECAUTIONS

WARNING: Welding arcs emit intense ultraviolet (UV) and infrared (IR) radiation which can cause severe eye and skin damage. Always wear appropriate personal protective equipment (PPE) when welding.

- Always inspect the helmet and lens for damage before each use. Do not use if damaged.
- Ensure the auto-darkening filter (ADF) is functioning correctly before starting any welding operation.
- Do not immerse the helmet in water or any other liquid.
- Protect the helmet from extreme temperatures and direct sunlight when not in use.
- This helmet is not suitable for laser welding or oxyacetylene welding/cutting applications.
- Always use the helmet in conjunction with other required PPE for welding, such as flame-resistant clothing and gloves.
- Replace front cover lenses regularly to maintain clear vision and protect the ADF.

3. PRODUCT COMPONENTS AND FEATURES

The ANDELI RL-600LB-DBB welding helmet includes the following main components and features:

- **Welding Helmet Shell:** Provides physical protection for the face and head.
- **Auto-Darkening Filter (ADF):** Automatically darkens upon arc strike. Features True Color technology and a 4.53" x

3.23" viewing area.

- **Solar Cells:** Powers the ADF and recharges the internal battery.
- **Headgear:** Adjustable 6-point cushioned headgear for comfort and stability.
- **External Controls:** Shade adjustment, sensitivity, and delay settings.
- **Replacement Lenses:** Includes 3 replacement clear cover lenses.



Image 1: ANDELI RL-600LB-DBB Welding Helmet. This image displays the full helmet, highlighting its panoramic viewing area, external control knobs for shade, sensitivity, and delay, and the solar panel strip above the main viewing window. The helmet features a distinctive blue and red graphic design.

4. SETUP AND ADJUSTMENT

4.1 Headgear Adjustment

1. **Fit the Headgear:** Place the helmet on your head. Adjust the top strap to ensure the helmet sits comfortably and securely.
2. **Adjust Headband Diameter:** Use the ratchet knob at the back of the headgear to tighten or loosen the headband until it fits snugly without being too tight.
3. **Adjust Distance and Angle:** Loosen the side knobs on the helmet to adjust the distance between your face and the ADF, and the angle of the helmet when in the down position. Tighten the knobs once the desired position is achieved. The 6-point cushioned headgear is designed to distribute weight evenly and reduce fatigue.

4.2 Initial ADF Check

Before first use, and periodically thereafter, perform the following check:

- Hold the helmet up to a bright light source (not direct sunlight or a welding arc).
- Press the test button (if available, otherwise briefly expose to a non-welding bright light). The lens should momentarily darken and then return to its clear state.
- If the lens does not darken or flickers, ensure the battery is charged (expose to light for solar charging) or replace the internal battery if applicable (refer to maintenance section).

5. OPERATING INSTRUCTIONS

The ANDELI RL-600LB-DBB helmet features external controls for easy adjustment of welding parameters.

5.1 Mode Selection (Weld/Cut/Grind)

Locate the mode selector knob on the side of the helmet. Rotate it to select the appropriate mode for your task:

- **WELD Mode:** For TIG, MIG, and ARC welding. The ADF will automatically darken to the selected shade when an arc is detected.
- **CUT Mode:** For plasma cutting applications.
- **GRIND Mode:** The ADF remains in its light state (shade 3-4) for grinding operations, providing eye protection from sparks and debris without darkening. Ensure this mode is selected when grinding to avoid accidental darkening.

5.2 Shade Adjustment

The shade knob allows you to select the appropriate darkness level for your welding process. Refer to standard welding shade charts for guidance. The helmet typically offers shades from DIN 9 to DIN 13 in weld mode.

- Rotate the **SHADE** knob to increase or decrease the darkness level.
- Always select a shade level that provides comfortable vision and adequate protection for the amperage and type of welding being performed.

5.3 Sensitivity Adjustment

The sensitivity control determines how easily the ADF detects the welding arc and darkens. Adjust this based on ambient light conditions and the welding process.

- Rotate the **SENSITIVITY** knob.
- Increase sensitivity in low light conditions or for low amperage TIG welding.
- Decrease sensitivity in bright ambient light to prevent accidental darkening from other light sources.

5.4 Delay Adjustment

The delay control sets the time the ADF remains dark after the welding arc has ceased. This prevents eye fatigue from afterglow and protects against bright flashes from adjacent welders.

- Rotate the **DELAY** knob to select a short, medium, or long delay time.
- A shorter delay is suitable for tack welding, while a longer delay is recommended for high amperage welding or when working with hot materials that emit bright light after the arc stops.

6. MAINTENANCE

Regular maintenance ensures the optimal performance and longevity of your welding helmet.

6.1 Cleaning

- **Helmet Shell:** Clean with mild soap and water. Avoid harsh solvents.
- **ADF and Cover Lenses:** Gently wipe with a soft, clean cloth. Do not use abrasive cleaners or solvents. Replace scratched or pitted cover lenses immediately.

6.2 Battery Replacement (if applicable)

The ANDELI RL-600LB-DBB helmet is primarily solar-powered with an internal rechargeable battery. If the ADF performance degrades, ensure it is exposed to sufficient light for solar charging. If issues persist, consult customer support as the internal battery may require professional service or replacement.

6.3 Storage

Store the helmet in a clean, dry place away from direct sunlight, extreme temperatures, and corrosive materials. Use the original packaging or a protective bag to prevent scratches.

7. TROUBLESHOOTING

Problem	Possible Cause	Solution
ADF does not darken when arc is struck.	Low battery charge. Sensitivity set too low. Sensors obstructed or dirty. ADF damaged.	Expose helmet to bright light for solar charging. Increase sensitivity setting. Clean sensors and front cover lens. Contact customer support for replacement.
ADF darkens without an arc (flickering).	Sensitivity set too high. Interference from other light sources.	Decrease sensitivity setting. Ensure no other bright lights are directly hitting the sensors.
Poor visibility through ADF.	Front or inner cover lens scratched/dirty. ADF damaged.	Clean or replace cover lenses. Contact customer support.
Helmet feels uncomfortable or unstable.	Headgear not properly adjusted.	Re-adjust headgear straps and ratchet knob for a secure and balanced fit.

8. SPECIFICATIONS

Feature	Detail
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Feature	Detail
Model	RL-600LB-DBB
Viewing Area	4.53" x 3.23" (Panoramic)
Optical Class	1/1/1/2
Light State	Shade 3-4 (Grind Mode)
Dark State	Adjustable, typically DIN 9-13
UV/IR Protection	Up to Shade 16 (permanent)
Power Supply	Solar cell with internal rechargeable battery
Battery Life	1,000+ hours (fully charged)
Switching Time	Lightning-Responsive
Delay Control	Adjustable (Short, Medium, Long)
Sensitivity Control	Adjustable
Material	Plastic
Weight	0.6 Kilograms
Included Components	Welding Helmet*1; Replacement Lens*3

9. WARRANTY AND SUPPORT

The ANDELI RL-600LB-DBB Welding Helmet comes with a **1-year warranty** from the date of purchase. This warranty covers defects in materials and workmanship under normal use.

The warranty does not cover damage caused by misuse, abuse, unauthorized modifications, or failure to follow the instructions in this manual.

For warranty claims, technical support, or to purchase replacement parts, please contact ANDELI customer service through the retailer where the product was purchased or visit the official ANDELI website.

Manufacturer: ANDELI

ASK A QUESTION ABOUT THIS MANUAL

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page’s manual context to help answer it.

Name

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Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question