

## Saker GJ106885-X71134

# Saker Auto Darkening Welding Helmet with LED Light Instruction Manual

Model: GJ106885-X71134

## 1. INTRODUCTION

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Thank you for choosing the Saker Auto Darkening Welding Helmet with LED Light. This manual provides essential information for the safe and effective operation, maintenance, and care of your welding helmet. Please read this manual thoroughly before use and retain it for future reference. This helmet is designed to protect your eyes and face from sparks, spatter, and harmful radiation under normal welding conditions.

The helmet features an auto-darkening filter (ADF) that automatically changes from a light state to a dark state when an arc is struck, and returns to the light state when welding stops. It also includes an integrated LED light for improved visibility in dark work areas.

## 2. SAFETY INFORMATION

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**WARNING: Welding and cutting processes can cause serious injury or death. Always follow safety precautions.**

- Always wear the welding helmet during welding or grinding operations to protect your eyes and face from arc rays, sparks, and spatter.
- Never look directly at the welding arc with unprotected eyes.
- Ensure the helmet is functioning correctly before each use. Test the auto-darkening feature by striking a test arc or using a suitable light source.
- Do not use the helmet if any part is damaged, cracked, or if the auto-darkening filter is not functioning properly. Replace damaged parts immediately.
- Use only genuine Saker replacement parts.
- Protect the auto-darkening filter from liquid and dirt.
- Do not immerse the helmet in water.
- This helmet is not suitable for laser welding or overhead welding applications.
- Ensure adequate ventilation in the work area to avoid inhaling welding fumes.

### 3. PACKAGE CONTENTS

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Verify that all items are present and undamaged upon unpacking:

- Saker Auto Darkening Welding Helmet with LED Light

### 4. PRODUCT FEATURES

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- **Ultimate Visual Clarity:** Features 1/1/1/2 optical class lens with True Color Technology, providing a clear and natural view of the weld pool and seam, reducing eye strain.
- **Fast & Reliable Arc Protection:** Equipped with dual high-performance arc sensors, reacting in 1/20,000 second. Adjustable shade range of DIN 9-13 (dark) and a light state of DIN 4, blocking 99% of harmful light.
- **All-Day Comfort & Adjustable Fit:** Fully adjustable headgear system with rotary knobs for tilt angle and a ratcheted knob for a secure, custom fit. Enhanced with breathable, sweat-absorbing padding.
- **Durable Build & Hybrid Power System:** Constructed from high-quality, impact and flame-resistant materials. Innovative hybrid power system combines efficient solar cells with a user-replaceable lithium battery.
- **Integrated LED Work Light:** Rechargeable LED work light with a USB charging port illuminates dark work areas.
- **Versatile Application:** Suitable for MIG, TIG, Stick (MMA) welding, plasma cutting, and grinding.

### 5. SETUP

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#### 5.1 Headgear Adjustment

The helmet's headgear is designed for maximum comfort and a secure fit. Proper adjustment is crucial for safety and comfort.

1. **Head Size Adjustment:** Use the ratcheted knob at the back of the headgear to adjust the circumference until the helmet fits snugly and securely on your head.
2. **Top Strap Adjustment:** Adjust the top strap to position the helmet correctly on your head, ensuring the viewing area is at eye level.
3. **Helmet Angle Adjustment:** Use the rotary knobs on the sides of the helmet to adjust the tilt angle, allowing the helmet to sit comfortably and provide optimal viewing.
4. **Tightness Adjustment:** Ensure the headgear is tight enough to prevent the helmet from slipping but not so tight as to cause discomfort.

# Adjustable Comfort Headband

Adjustable Top Strap

Soft Sponge Sweatband

Angle Adjustment Knob

Width Adjustment Knob



Image: Detailed view of the adjustable comfort headband, showing the top strap, soft sponge sweatband, angle adjustment knob, and width adjustment knob.

## 5.2 LED Light Installation and Charging

The integrated LED light provides illumination for dark work areas.

1. **Installation:** The LED light is typically pre-installed. If not, securely attach it to the designated mount on the top front of the helmet.
2. **Charging:** The LED light is rechargeable via a USB port. Connect a standard USB charging cable to the light and a power source. Charge fully before first use.
3. **Operation:** Press the button on the LED light to cycle through different light modes (e.g., high, low, off).

## 5.3 Protective Film Removal

Before first use, remove any protective films from both sides of the inner and outer lenses of the auto-darkening filter.

## 6. OPERATING INSTRUCTIONS

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The Saker Auto Darkening Welding Helmet is designed for ease of use and optimal protection.

### 6.1 Powering On/Off

The auto-darkening filter is solar-powered and activates automatically when exposed to light. There is no manual on/off switch for the auto-darkening function. Ensure the battery is charged for optimal performance.

### 6.2 Shade Adjustment

The helmet offers an adjustable shade range to suit various welding processes and current levels.

- **Welding Mode:** Use the external shade knob to select a shade level between DIN 9 and DIN 13. Refer to welding standards for appropriate shade levels for your specific application.
- **Light State:** In the light state (not welding), the shade is DIN 4, providing clear visibility for preparation and inspection.



Image: Illustration of the auto-darkening filter (ADF) showing internal components like solar panel, arc sensor, sensitivity, delay, and battery cover. Also displays different shade levels (DIN 9-13) during welding.

### 6.3 Sensitivity Adjustment

The sensitivity control adjusts how readily the filter reacts to the welding arc. This is useful for different lighting conditions and welding processes.

- Turn the 'SENS' knob to adjust sensitivity. Higher sensitivity (HI) is suitable for low-amp TIG welding or when the arc is partially obstructed. Lower sensitivity (LO) is for high-amp welding or when working near other welders.

### 6.4 Delay Adjustment

The delay control determines how long the filter remains dark after the welding arc ceases.

- Turn the 'DELAY' knob to adjust the delay time. A short delay (MIN) is suitable for tack welding or short welds. A longer delay (MAX) is recommended for high-amp welding to prevent eye fatigue from residual glow.



Image: Close-up of the helmet's side, showing the external rotary knobs for shade, sensitivity, and delay adjustments. The integrated LED light is also visible.

## 6.5 Grinding Mode

The helmet includes a grinding mode to prevent the filter from darkening while grinding.

- Activate the grinding mode using the designated switch or knob (often labeled 'Grind/Weld'). In grinding mode, the ADF remains in its light state (DIN 4) for clear visibility during grinding operations. Remember to switch back to welding mode before striking an arc.

## 6.6 Using the LED Light

The LED light can be activated independently to illuminate your workspace.

- Press the button on the LED light to turn it on/off and cycle through brightness settings.

Your browser does not support the video tag.

Video: Demonstrates the Saker Auto Darkening Welding Helmet in use, highlighting its clear viewing, adjustable settings, and wide application across various welding tasks. The video shows a user wearing the helmet while performing welding operations, adjusting controls, and using the integrated LED light.

## 7. MAINTENANCE

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Regular maintenance ensures the longevity and proper functioning of your welding helmet.

### 7.1 Cleaning

- **Helmet Shell:** Clean the helmet shell with a mild soap and water solution. Avoid harsh solvents or abrasive cleaners.
- **Lenses:** Gently wipe the inner and outer protective lenses with a soft, clean cloth. For stubborn dirt, use a lens cleaning solution specifically designed for plastic lenses. Do not use abrasive materials or solvents on the auto-darkening filter itself.
- **Headgear:** Clean the headgear and sweatband with mild soap and water. The sweatband may be removable for washing.

### 7.2 Lens Replacement

Replace the outer and inner protective lenses regularly, especially if they become scratched, pitted, or cloudy, as this can impair visibility and reduce protection.

1. Carefully remove the retaining frame or clips holding the old lens in place.
2. Insert the new protective lens, ensuring it is seated correctly.
3. Secure the retaining frame or clips.

### 7.3 Battery Replacement

The auto-darkening filter uses a user-replaceable lithium battery in conjunction with solar cells. A low battery indicator will typically alert you when replacement is needed.

1. Locate the battery compartment on the auto-darkening filter (refer to the 'Dimming Display' image for general location).
2. Open the battery cover.
3. Remove the old battery and insert a new, compatible lithium battery, ensuring correct polarity.
4. Close the battery cover securely.

## 8. TROUBLESHOOTING

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If you encounter issues with your welding helmet, refer to the following common problems and solutions:

Problem	Possible Cause	Solution
Helmet does not darken when arc is struck.	Low battery; Arc sensors obstructed; Incorrect sensitivity setting; Filter damaged.	Check/replace battery; Clean arc sensors; Increase sensitivity; Replace ADF.
Inconsistent darkening or flickering.	Low battery; Arc sensors partially obstructed; Sensitivity too high/low; Other light sources interfering.	Check/replace battery; Clean arc sensors; Adjust sensitivity; Shield from other light sources.
Poor visibility.	Protective lenses dirty or scratched; Incorrect shade setting; ADF damaged.	Clean/replace protective lenses; Adjust shade setting; Replace ADF.
LED light not working.	Battery discharged; Loose connection; Light damaged.	Recharge LED light battery; Check connection; Contact support for replacement.

## 9. SPECIFICATIONS

Feature	Detail
Brand	Saker
Model Number	GJ106885-X71134
Optical Class	1/1/1/2
Light State Shade	DIN 4
Dark State Shade	DIN 9-13 (Adjustable)
Switching Time	1/20,000 second
Arc Sensors	2
Power Supply	Solar Powered with User-Replaceable Lithium Battery
Material	Carbon Fiber, Fiberglass, High Density Polyethylene (HDPE)
Color	Black
Included Components	Auto Darkening Welding Helmet with LED Light

## 10. WARRANTY AND SUPPORT

This Saker Auto Darkening Welding Helmet comes with a **2-Year Warranty**.

For warranty claims, technical support, or inquiries about replacement parts, please contact Saker customer service. You can find more information and contact details by visiting the official Saker store:

[Visit the Saker Store](#)

