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## ARCCAPTAIN HSH-G999

# ARCCAPTAIN HSH-G999 Auto-Darkening Welding Helmet User Manual

Model: HSH-G999 (SkeletonRider Style)

Brand: ARCCAPTAIN

### INTRODUCTION

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This manual provides essential instructions for the safe and effective use of your ARCCAPTAIN HSH-G999 Auto-Darkening Welding Helmet. Please read this manual thoroughly before operating the helmet to ensure proper function, safety, and longevity of the product. This helmet is designed to protect your eyes and face from sparks, spatter, and harmful radiation under normal welding conditions.



The ARCCAPTAIN HSH-G999 Auto-Darkening Welding Helmet in SkeletonRider style, showcasing its design and protective features.

## SAFETY INFORMATION

Your safety is paramount. Always adhere to the following safety guidelines when using the welding helmet:

- This welding helmet is designed for ARC, MIG, TIG welding, and plasma cutting applications. It is not suitable for laser welding or oxyacetylene welding/cutting.
- Always wear appropriate safety glasses underneath the welding helmet.
- Ensure the helmet is properly adjusted and fits securely before beginning any welding operation.

- Do not use the helmet if the lens or helmet body is damaged. Replace damaged parts immediately.
- The auto-darkening filter (ADF) protects against harmful UV/IR radiation even in the light state. However, never look directly at the welding arc with an un-darkened filter.
- Regularly inspect the helmet for any signs of wear or damage.
- This product complies with ANSI Z87.1, EN379 CE, and CSA Z94.3 standards for personal eye and face protection.

## PRODUCT COMPONENTS

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The ARCCAPTAIN HSH-G999 welding helmet package includes the following items:

- 1 x ARCCAPTAIN HSH-G999 Auto-Darkening Welding Helmet
- 1 x Spare CR2450 Lithium Battery
- 1 x ARCCAPTAIN Storage Bag
- 3 x Spare Protective Lenses
- User Manual (this document)

Key features of the helmet include:

- **Large Viewing Screen:** 10 x 9 cm (approximately 3.94 x 3.54 inches) for an enhanced visual experience.
- **True Color Technology:** Provides superior optical clarity (1/1/1/2 rating) for a natural view of your work.
- **4 Premium Arc Sensors:** Ensures rapid and reliable auto-darkening.
- **Adjustable Shade:** DIN4 in light state, DIN5-9/9-13 in dark state.
- **Solar Powered with Battery Backup:** Utilizes a solar cell and a replaceable CR2450 lithium battery for extended life.

# 20FT MILITARY GRADE DROP PROTECTION



The ARCCAPTAIN welding helmet highlighting its robust construction, corrosion resistance, shock resistance, flame resistance, lightweight design, and comfort.

## SETUP INSTRUCTIONS

### 1. Battery Installation/Check

The helmet is powered by a solar cell and a replaceable CR2450 lithium battery. The battery is typically pre-installed. Ensure the battery is correctly seated and functional. If the helmet does not darken, replace the CR2450 battery.

### 2. Headgear Adjustment

Adjust the headgear for a comfortable and secure fit. The helmet should sit firmly on your head without being too tight or loose. Use the adjustment knobs and straps to customize the fit:

- **Top Strap:** Adjust the top strap to control how high or low the helmet sits on your head.
- **Rear Headband:** Rotate the knob at the back to tighten or loosen the headband circumference.
- **Pivot Points:** Adjust the tension at the side pivot points to control the helmet's flip-up and flip-down resistance.

### 3. Initial Function Test

Before welding, perform a quick test:

- Point the helmet's front towards a bright light source (not the sun).
- Briefly press the test button (if available) or quickly flash the light source. The lens should darken instantly and then return to its clear state.
- If the lens does not darken, check the battery and ensure sensors are clean.

## OPERATING INSTRUCTIONS

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### 1. Power On/Off

The auto-darkening filter is always on and ready for use, powered by the solar cell and battery. There is no manual on/off switch. It automatically enters a low-power sleep mode when not exposed to light.

### 2. Shade Adjustment

The helmet offers variable shade settings to accommodate different welding processes and amperages. The clear state is DIN4. The dark state can be adjusted between DIN5-9 and DIN9-13.

- Use the external shade knob to select the appropriate shade level for your welding task. Refer to standard welding shade charts for guidance.
- For lower amperage welding or plasma cutting, shades DIN5-9 are typically used.
- For higher amperage ARC/MIG/TIG welding, shades DIN9-13 are typically used.

### 3. Sensitivity Adjustment

The sensitivity control adjusts how easily the sensors detect the welding arc and trigger the darkening function. Adjust this knob based on ambient light conditions and the intensity of the arc.

- **High Sensitivity:** For low amperage TIG welding or when working in dimly lit environments.
- **Low Sensitivity:** For high amperage welding or when working in bright ambient light to prevent false triggering.

### 4. Delay Adjustment

The delay control determines how long the lens remains dark after the welding arc has ceased. This prevents eye fatigue from residual glow or brief flashes.

- **Short Delay:** For tack welding or short welds where quick return to clear state is desired.
- **Long Delay:** For high amperage welding or when working with materials that retain a bright glow after the arc is extinguished.

# **FAST** DARKENING, NO DELAY

Upgraded dimming system, 0.1ms darkening without delay, protect your eyes away from any harm

**4 Premium  
Arc Sensors**


**Response Time  
1/10000s**



Illustration of the helmet's fast darkening system, featuring 4 premium arc sensors and a response time of 1/10000s for eye protection.

# UPGRADED WELDING HELMET



  
True Color

  
PA Durable  
Material

  
1/25000s  
Darkening

  
Large Screen

A welder utilizing the ARCCAPTAIN HSH-G999 helmet, demonstrating its large viewing screen and true color technology during active welding.

# WIDE APPLICATION



STICK



MIG



TIG



CUTTING

The ARCCAPTAIN welding helmet is suitable for various applications including Stick, MIG, TIG welding, and Cutting.

## MAINTENANCE

### 1. Cleaning

- **Helmet Shell:** Clean the helmet shell with a mild soap and water solution. Avoid harsh solvents.
- **Protective Lenses:** Wipe the inner and outer protective lenses with a soft, clean cloth. Replace them if they become scratched or pitted.
- **Auto-Darkening Filter (ADF):** Gently clean the ADF surface with a soft, lint-free cloth. Do not use abrasive cleaners or solvents. Keep the arc sensors clean and unobstructed.

### 2. Battery Replacement

When the battery indicator (if present) signals low power, or if the auto-darkening function becomes unreliable, replace the CR2450 lithium battery. The battery compartment is typically located on the ADF cartridge. Use the spare battery provided or a new CR2450 battery.

### 3. Storage

Store the helmet in a cool, dry place, away from direct sunlight and extreme temperatures. Use the provided storage bag to protect it from dust and scratches.

## TROUBLESHOOTING

Problem	Possible Cause	Solution
Lens does not darken when welding.	<ul style="list-style-type: none"><li>Low battery.</li><li>Arc sensors are dirty or obstructed.</li><li>Sensitivity setting is too low.</li><li>Helmet not positioned correctly.</li></ul>	<ul style="list-style-type: none"><li>Replace CR2450 battery.</li><li>Clean arc sensors.</li><li>Increase sensitivity setting.</li><li>Adjust helmet position to ensure sensors face the arc.</li></ul>
Poor visibility through the lens.	<ul style="list-style-type: none"><li>Protective lenses are dirty or scratched.</li><li>Shade setting is too high for the application.</li></ul>	<ul style="list-style-type: none"><li>Clean or replace protective lenses.</li><li>Adjust shade setting to a lower value.</li></ul>
Helmet feels uncomfortable or unstable.	<ul style="list-style-type: none"><li>Headgear not properly adjusted.</li></ul>	<ul style="list-style-type: none"><li>Re-adjust the top strap, headband knob, and pivot points for a secure and comfortable fit.</li></ul>
Lens flickers or darkens intermittently.	<ul style="list-style-type: none"><li>Low battery.</li><li>Arc sensors partially obstructed or dirty.</li><li>Sensitivity setting too low for the arc.</li></ul>	<ul style="list-style-type: none"><li>Replace CR2450 battery.</li><li>Clean arc sensors.</li><li>Increase sensitivity setting.</li></ul>

## SPECIFICATIONS

<b>Model</b>	HSH-G999 (Welding Helmet Auto Darkening)
<b>Style</b>	SkeletonRider
<b>Brand</b>	ARCCAPTAIN
<b>Material</b>	Polypropylene (PP) and Polyamide (PA)
<b>Color</b>	Black
<b>Viewing Area</b>	10 x 9 cm (approx. 3.94 x 3.54 inches)
<b>Optical Clarity</b>	1/1/1/2
<b>Light State Shade</b>	DIN4
<b>Dark State Shade</b>	Variable DIN5-9 / DIN9-13
<b>Arc Sensors</b>	4 Premium Sensors
<b>Power Supply</b>	Solar Cell & Replaceable CR2450 Lithium Battery
<b>Weight (Item)</b>	1.1 pounds (approx. 0.5 kg)
<b>Compliance</b>	ANSI Z87.1, EN379 CE, CSA Z94.3
<b>Included Components</b>	1 Welding Helmet, 1 Spare CR2450 Battery, 1 Storage Bag, 3 Spare Lenses

## WARRANTY INFORMATION

Specific warranty details for the ARCCAPTAIN HSH-G999 welding helmet may vary by region and retailer.

Please refer to the warranty card included with your product or visit the official ARCCAPTAIN website for the most up-to-date warranty policy. Generally, ARCCAPTAIN products are covered against manufacturing defects for a specified period from the date of purchase.

Keep your proof of purchase (receipt) as it will be required for any warranty claims.

## CUSTOMER SUPPORT

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For technical assistance, troubleshooting not covered in this manual, or inquiries regarding parts and accessories, please contact ARCCAPTAIN customer support.

- **Website:** Visit the official ARCCAPTAIN website for support resources, FAQs, and contact information.
- **Email/Phone:** Refer to the contact details provided on the ARCCAPTAIN website or your product packaging.

When contacting support, please have your product model (HSH-G999) and purchase information ready.