AKETEK® Lift-Up AIR

User instructions

Lift-Up AIR helmet



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1. Quick-start guide

Fit the headgear: hold down the buttons on the side mounts and slide the headgear in until it clicks into position. Make sure the black headband faces into the helmet. Adjust the position for a comfortable fit.

Prepare the cover plates: remove the protective film from both sides of the outer and inner cover plates.

Adjust the settings: select welding or grinding mode with switch (1). Set sensitivity using the left-hand knob (2). Adjust the shade using the right-hand knob (3). Select WELD before welding.



1. WELD/GRIND · 2. Sensitivity · 3. Shade

For long-term storage, select GRIND mode to extend battery life.

2. Introduction

These user instructions apply to the AKETEK® Lift-Up welding helmet equipped with an auto-darkening filter (ADF). The helmet is designed for electric arc welding (MIG/MAG, MMA, TIG), grinding and plasma cutting. It provides reliable protection against ultraviolet radiation (UV), infrared radiation (IR), visible light, sparks and weld spatter when used according to these instructions.

AKETEK® auto-darkening filters must always be used with the welding helmet. The ADF has two sensors at eye level that react independently to welding arcs and darken the filter. After welding, the filter automatically returns to a light state, allowing the welder to keep the helmet on throughout the work and improving safety, efficiency and weld quality.

These instructions must not be removed except by the user of this equipment. Current instructions are available at www.aketek.com.

Areas of application: the helmet must always be fitted with an auto-darkening filter, grinding visor, inner and outer cover plates. Use only for electric arc welding (MIG/MAG, MMA, TIG) and plasma welding in the temperature range −5°C to +55°C (23°F to 131°F).

3. Safety & limitations

	Note: important information.
	Attention: possible damage to the helmet or a component.
	Warning: risk of severe or fatal injury.

Use the helmet only for electric arc welding, plasma welding and grinding.

The helmet must always be fitted with an AKETEK® auto-darkening filter and inner and outer cover plates. Make sure the grinding visor is also fitted.

Before welding, inspect the helmet, welding filter and cover plates for cracks or scratches. Welding with damaged components can prevent the protective equipment from operating and protecting correctly.

Use the helmet only with AKETEK® parts. Substitute components or modifications may impair protection and cause the equipment to no longer comply with the standards.

Modifications, substitute products or cleaning the helmet and its components without carefully reading these instructions can damage the helmet and cause serious injuries. This also voids warranty claims.

Not suitable for driving or road use. The protector can affect recognition of colours and detection of signal lights.



Protectors that have suffered an impact must not be used. Discard and replace them.

4. Before use

Inspect the product before every use. The ADF and both cover plates must be clean and free from cracks or scratches. Replace any damaged helmet parts before use.

Remove the protective film from both sides of new cover plates. Check that all parts are securely fitted.

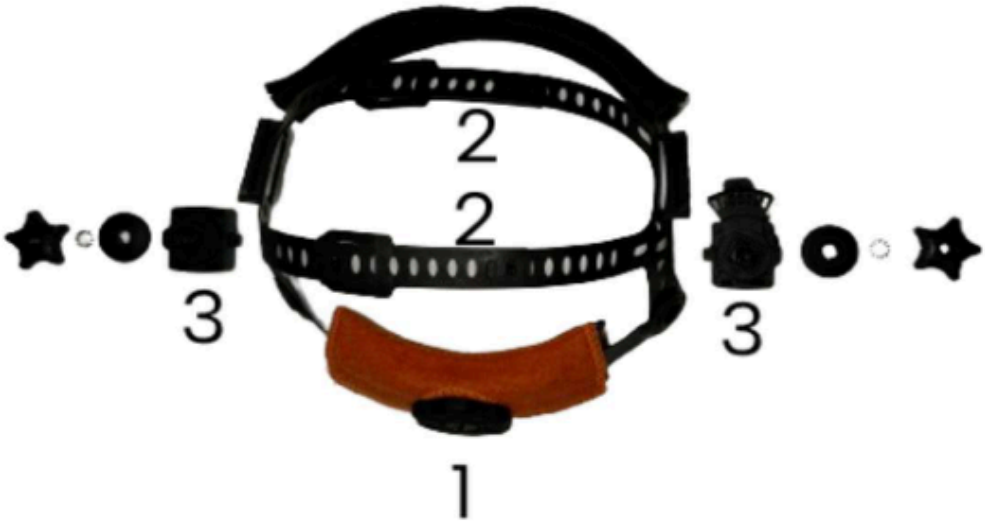
Switch from GRIND to WELD and check for a brief flicker of the ADF. Select WELD before welding.

If the filter does not darken when an arc is struck, stop welding immediately and follow the troubleshooting instructions.

5. Adjusting the headgear

1. Put on the helmet and turn the rear knob until the headgear fits firmly and comfortably.

2. Adjust the two top straps to suit your head. The flexible neck pad supports a comfortable fit.
3. Press the buttons on both sides and move the headgear forward or backward. Five positions let you adjust the distance to the filter.
4. Adjust the upward/downward angle for a clear field of view. To remove the headgear, press the buttons and slide it out of the holders on both sides.



Headgear adjustment: 1 rear sizing knob; 2 top straps; 3 side distance adjustments.

6. Operating instructions

The ADF is always on: no power-on step is required. In GRIND mode it will not darken. Always select WELD before welding.

The ADF battery life is more than 10 years under normal use. Storing the helmet in a light environment or in GRIND mode can extend battery life. Select GRIND for long-term storage.

If the ADF fails to switch to its dark state in WELD mode, stop welding immediately. Check the troubleshooting chapter before using it again.

7. Sensitivity & shade

Sensitivity: turn the “Sensitivity” knob clockwise to increase sensitivity and counterclockwise to reduce it. Use maximum sensitivity unless the application requires a different setting.

Shade: turn the “Shade” knob clockwise to increase the shade number and counterclockwise to decrease it. The available dark-state range is 8–12.

Ampere	5	10	15	20	30	40	60	80	100	125	150	175	200	225	250	275	300	350	400
Covered electrodes					9		10		11				12					13	
MIG (Steel)									10	11			12					13	
MIG (Light metal leg.)									10	11			12			13			14
TIG (WIG)		9			10		11			12			13			14			
MAG							10		11		12		13						14
Plasma welding	7	8	9	10		11		12			13				14				
Plasma cutting								11				12				13			

Recommended shades for welding applications

WARNING: Applications requiring shade 13 or higher are not suitable for this ADF.

8. Raising & lowering the visor

The Lift-Up visor follows a different movement from other helmets. Follow the side guides when raising or lowering it to avoid damage. When lowering, pull the visor forward first, then down.

9. Maintenance & cleaning

The recommended period of use is 5 years, depending on use, cleaning, storage and maintenance. Inspect regularly, replace damaged or defective parts and keep the helmet free from dust and other particles. Handle carefully and keep in a clean environment.

Helmet shell: clean with a damp cloth and water. A damaged shell can be replaced separately.

Outer and inner cover plates: clean with a damp cloth. Replace scratched, damaged or deteriorated plates; transparency can decrease over time.

ADF: no special maintenance is needed over its lifespan. If cleaning is necessary, wipe gently with a clean, soft cloth. Do not use cleaning agents, solvents or other chemicals. Cleaning damage to the filter is not covered by the warranty.

Sweatband: sweatbands from 2026 onwards are washable. Neck pad: do not wash it; replace it periodically for hygiene.

Clean the grinding visor with a damp cloth. Replace it if damaged or if its transparency deteriorates.

10. Storage & transport

Check that the helmet and its components have not been damaged in transit. Store and transport in the original bag or packaging, in a dry place between −10°C and +40°C, below 90% relative humidity, away from direct sunlight and heat sources.

11. Spare parts

Use original AKETEK® parts. Contact a distributor or Aketek support for replacements.

Part	Part number
Grinding visor	73002
Outer cover plate	72005, 72010
Inner cover plate	71103, 71110
ADF	12201
Headgear	12204
Sweatband	74102, 74105
Neck pad	75002, 75005
Magnifying lens (+1.0 to +3.0 dioptres)	77010, 77015, 77020, 77025, 77030

12. Troubleshooting

Problem	Solution
ADF does not darken	Switch from GRIND to WELD and check for a flicker. If there is no flicker, contact support. Check WELD mode, uncover the sensors and remove dust, then try increasing sensitivity. If it still fails to darken when an arc is struck, stop welding immediately and contact support.
ADF stays dark	It may have overheated because it is too close to the weld. Allow it to cool and maintain a safe distance. An Aketek heat-protection plate is available to reduce heat sensitivity.
ADF reacts to other welders	Reduce sensitivity. If this continues at lower sensitivity, use curtains or another method to block the other arc.
Blurred or distorted view	Check that the protective film has been removed from both sides of the protective plates, including the grinding visor where fitted.
Weld spatter on the ADF glass	The filter is permanently damaged and this is not covered by warranty. Always fit the outer and inner cover plates correctly.
The grinding visor gets stuck	Move it outward and then upwards or downwards, following the tracks on the sides of the helmet.

13. Replacing parts

Grinding visor

1. Pull out from its lower edge.
2. Remove the film from both sides of the new visor, insert one side and flex it to clip the other side into place.

Outer cover plate

1. Pull from the lower edge to remove it.
2. Remove the film from both sides of the new plate.

3. Insert one side, then flex the plate until the other side clips in.

Inner cover plate

1. Pull it out of the side holders on the filter.
2. Remove the film from both sides of the replacement and slide it into place.

ADF cassette

1. Release the locking spring from the two plastic holders and remove the cassette.
2. Fit the new cassette with its control knobs at the upper edge facing into the helmet.
3. Fold the metal locking spring back and secure it over both holders.

Headgear

1. Press the button on top of each bracket to release it.
2. Hold the buttons down while sliding the replacement headgear into position.

Sweatband

1. Detach it from the headband mounts.
2. Fit the new band on the front facing the filter, with the matt side outward; wrap it around and secure it to the same mounts.

Neck pad

1. Remove the soft pad and attach a replacement.

Optional magnifying lens

1. Fit using the same method as the inner cover plate.

14. Technical specifications

Lift-Up AIR helmet

Feature	Specification
Optical performance	1/1/1/1 (EN 379) / W
Switching time	0.1 ms
Angular dependence class	V1
Light state	3
Lowest dark state	8
Highest dark state	12
UV/IR protection	At all times
Operating temperature	−5°C – +55°C
Viewing area	100 × 54 mm
Weight	930 g
Tested to	ANSI Z87.1; EN ISO 16321-1:2022; EN ISO 16321-2:2021

Feature	Specification
Shell / filter / headgear materials	PA66 / ABS, glass / PE
ADF warranty	2 years; see warranty chapter
Raised-visor viewing area	170 × 85 mm

15. Product markings

If the impact-resistance symbols on the lens/filter and helmet differ, the lower level applies to the complete protector.

Helmet shell

Marking	Meaning
16321	Standard
AKE	Manufacturer identification
W	Welding filter
14	Maximum shade number
E	Impact resistance (120 m/s)
1-M	Applicable head size

Auto-darkening filter

Marking	Meaning
16321	Standard
AKE	Manufacturer identification
W	Welding filter
3 / 8–12	Light / dark state shade
V1	Angular dependence class

Grinding visor

Marking	Meaning
AKE	Manufacturer identification
1	Enhanced optical performance
E	Impact resistance (120 m/s)

Outer cover plate

Marking	Meaning
AKE	Manufacturer identification

Marking	Meaning
1	Enhanced optical performance
E	Impact resistance (120 m/s)

Inner cover plate

Marking	Meaning
AKE	Manufacturer identification
1	Enhanced optical performance
C	Impact resistance (45 m/s)

Grinding visor frame

Marking	Meaning
16321	Standard
AKE	Manufacturer identification
E	Impact resistance (120 m/s)
1-M	Applicable head size

Earlier markings: EN 175 / EN 379 / EN 166

Marking	Meaning
3	Light state
8–12	Variable dark shade
AKE	Manufacturer identification
1/1/1/1	Optical class
B	Impact resistance (120 m/s)
S	Increased robustness



Example of a year scale on a moulded marking.



Example of a month scale (1–12). These illustrations do not specify the date of your helmet.

16. Conformity & notified body

EU type examination, module B, for EN ISO 16321-1:2022 / EN ISO 16321-2:2021, performed by:

DIN CERTCO Gesellschaft für Konformitätsbewertung mbH, Alboinstr. 56, D-12103 Berlin, Germany.

Notified body registration number: 0196.

The declaration of conformity is available at www.aketek.com. This document complies with the requirements of Regulation (EU) 2016/425 of the European Parliament and of the Council.

17. Warranty

The ADF has a two-year warranty against defects in materials or workmanship under normal use. Aketek Industries AB will provide repair, replacement or refund for a product or part found defective. Filters that fail to perform as specified within the first two years are replaced without charge.

Keep a copy of the original invoice and the serial number as proof of purchase. The warranty excludes indirect or consequential damage and excludes filters that have been tampered with, misused, abused, improperly maintained, fitted with non-original components or altered from their original configuration.

18. Recycling & manufacturer



Do not dispose of the product with household waste. It contains electrical components and must be handled as electronic waste. Follow local battery-disposal rules. Contact Aketek support if you need help with disposal.

Manufacturer: Aketek Industries AB, Bernhard Erikssons väg 1B, SE-791 32 Falun, Sweden. VAT: SE556594164701. Website: www.aketek.com.

While every effort has been made to ensure the accuracy and completeness of these instructions, no guarantee or liability can be accepted for any errors or omissions. Aketek Industries AB reserves the right to change the specifications of the product described at any time without prior notice.

Disclaimer

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The declaration of conformity can be found on our website www.aketek.com. This document complies with the requirements of the EU regulation 2016/425 of the European Parliament and of the Council.