



WELDLINE[®]
by Lincoln Electric
EUROONE

Instructions for Safety, Use and Maintenance



GRAPHIC MAY VARY

SAFETY PRECAUTIONS - Read before using



WARNING: This equipment must be used by qualified personnel. Be sure that all installation, operation, maintenance and repair procedures are performed only by qualified person. Read and understand this manual before operating this equipment. Failure to follow the instructions in this manual could cause serious personal injury, loss of life, or damage to this equipment. Read and understand the following explanations of the warning symbols. Lincoln Electric is not responsible for damages caused by improper installation, improper care or abnormal operation.



WARNING: This symbol indicates that instructions must be followed to avoid serious personal injury, loss of life, or damage to this equipment. Protect yourself and others from possible serious injury or death.



READ AND UNDERSTAND INSTRUCTIONS: Read and understand this manual before operating this equipment. Arc welding can be hazardous. Failure to follow the instructions in this manual could cause serious personal injury, loss of life, or damage to this equipment.



ELECTRIC SHOCK CAN KILL: Welding equipment generates high voltages. Do not touch the electrode, work clamp, or connected work pieces when this equipment is on. Insulate yourself from the electrode, work clamp, and connected work pieces.



ELECTRICALLY POWERED EQUIPMENT: Turn off input power using the disconnect switch at the fuse box before working on this equipment. Ground this equipment in accordance with local electrical regulations.



ELECTRICALLY POWERED EQUIPMENT: Regularly inspect the input, electrode, and work clamp cables. If any insulation damage exists replace the cable immediately. Do not place the electrode holder directly on the welding table or any other surface in contact with the work clamp to avoid the risk of accidental arc ignition.



ELECTRIC AND MAGNETIC FIELDS MAY BE DANGEROUS: Electric current flowing through any conductor creates electric and magnetic fields (EMF). EMF fields may interfere with some pacemakers, and welders having a pacemaker shall consult their physician before operating this equipment.



CE COMPLIANCE: This equipment complies with the European Community Directives.



ARTIFICIAL OPTICAL RADIATION: According with the requirements in 2006/25/EC Directive and EN 12198 Standard, the equipment is a category 2. It makes mandatory the adoption of Personal Protective Equipments (PPE) having filter with a protection degree up to a maximum of 15, as required by EN169 Standard.



FUMES AND GASES CAN BE DANGEROUS: Welding may produce fumes and gases hazardous to health. Avoid breathing these fumes and gases. To avoid these dangers the operator must use enough ventilation or exhaust to keep fumes and gases away from the breathing zone.



ARC RAYS CAN BURN: Use a shield with the proper filter and cover plates to protect your eyes from sparks and the rays of the arc when welding or observing. Use suitable clothing made from durable flame-resistant material to protect your skin and that of your helpers. Protect other nearby personnel with suitable, non-flammable screening and warn them not to watch the arc nor expose themselves to the arc.



WELDING SPARKS CAN CAUSE FIRE OR EXPLOSION: Remove fire hazards from the welding area and have a fire extinguisher readily available. Welding sparks and hot materials from the welding process can easily go through small cracks and openings to adjacent areas. Do not weld on any tanks, drums, containers, or material until the proper steps have been taken to insure that no flammable or toxic vapors will be present. Never operate this equipment when flammable gases, vapors or liquid combustibles are present.



WELDED MATERIALS CAN BURN: Welding generates a large amount of heat. Hot surfaces and materials in work area can cause serious burns. Use gloves and pliers when touching or moving materials in the work area.



SAFETY MARK: This equipment is suitable for supplying power for welding operations carried out in an environment with increased hazard of electric shock.



Materials which may come into contact with the wearer's skin could cause allergic reactions to susceptible individuals.



This is not a safety helmet ! This helmet has been designed only to protect against the risks of welding processes.



WARNING: Severe personal injury could occur if the user fails to follow the above mentioned warnings and/or fails to follow the operating instructions.

COMMON PROBLEMS AND REMEDIES

Irregular Darkening Dimming

Headgear has been set unevenly and there is an uneven distance from the eyes to the filter lens (Reset the headgear to reduce the difference to the filter).

Auto-Darkening filter does not darken or flickers

- ① Front cover lens is soiled or damaged (Change the cover lens).
- ② Sensors are soiled (Clean the sensors surface).
- ③ Welding current is too low (Reset the sensitivity level to higher).

Slow response

Operating temperature is too low (Do not use at temperatures below -5 °C or 23 °F).

Poor vision

- ① Front / inside cover lens and / or the filter is soiled (Change lens).
- ② There is insufficient ambient light.
- ③ Shade number is incorrectly set (Reset the shade number).
- ④ Check if removing the film on the front cover lens.

Welding helmet slips

Headgear is not properly adjusted (Readjust the headgear).

WELDING USING THE EUROONE HELMET

Selecting shade level

Select the shade level you require according to the welding process you will use by referring to the "Shade Guide Table" below for settings. Turn the shade control knob to the shade number required (See fig.1).

Selecting delay time

When welding ceases, the viewing window automatically changes from dark back to light but with a pre-set delay to compensate for any bright afterglow on the workpiece. The delay time / response can be set to "S" (short: 0.1 sec.) or "L" (long: 1.0 sec.) as you require using the infinitely dial knob on the back of the auto darkening filter (See fig.2a). It is recommended to use a shorter delay with spot welding applications and a longer delay with applications using higher currents. Longer delays can also be used for low current TIG welding, and TIG / MIG / MAG pulse.

Sensitivity

The sensitivity can be set to "HI" (high) or "LO" (low) by using the infinitely dial knob on the back of the auto darkening filter. The "Mid-High" setting is the normal setting for everyday use. The maximum sensitivity level is appropriate for low welding current work, TIG, or special applications. Higher sensitivity setting is necessary if lens flashing on and off. Where the operation of the helmet is disturbed by excess ambient light, or another welding machine close by, use the "LO" setting (See fig.2b). As a simple rule, for optimum performance, it is recommended to set sensitivity to the maximum at the beginning and then gradually reduce it, until the filter reacts only to the welding light flash and without annoying spurious triggering due to ambient light conditions (direct sun, intensive artificial light, neighbouring welder's arcs etc.).

Selecting the grind option

Turn the dial knob to the "Grind" position, the auto darkening function is turned off allowing a clear view to grind. Before restarting welding work, ensure that the auto darkening filter turns back to weld mode (See fig.1).

Adjusting Headgear for Maximum Comfort

The overall circumference of the headgear can be made larger or smaller by rotating the knob on the back of the headgear. (See adjustment "Y" in fig.3). This can be done while wearing the helmet and allows just the right tension to be set to keep the helmet firmly on the head without it being too tight.

If the headgear is riding too high or too low on your head, adjust the strap which passes over the top of your head. To do this release the end of the band by pushing the locking pin out of the hole in the band. Slide the two portions of the band to a greater or lesser width as required and push the locking pin through the nearest hole. (See adjustment "W" in fig.3).

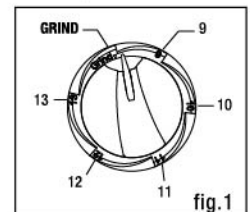


fig.1

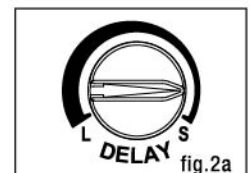


fig.2a

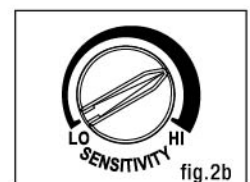
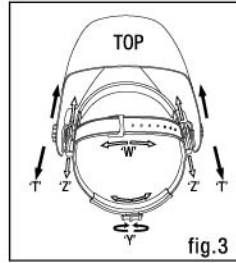


fig.2b

Test the fit of the headgear by lifting up and closing down the helmet a few times while wearing it. If the headgear moves while tilting, re-adjust it until it is stable.

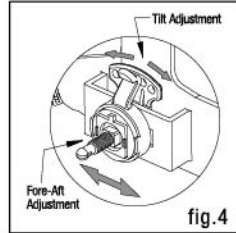
Adjusting the distance between the helmet and the face

Step 1: Undo the block nut (See "T" in fig.3) to adjust the distance between the helmet and your face in the down position.
Step 2: Re-tighten the block nut when adjustment is complete.



Adjusting view angle position

TILT: Tilt adjustment is located on right side of helmet. Loosen the right headgear tension knob and push the top end of the adjustment lever outward until the lever's Stop Tab clears the notches. Then rotate the lever forward or back to the desired tilt position. The Stop will automatically engage again when released locking the helmet into position (See fig.4).



You are now ready to use the helmet. The shading may be adjusted during use by re-setting the potentiometer control.

SHADE CHART FOR WELDING

Welding Process	ARC CURRENT (Amperes)																							
	0.5	2.5	10	20	40	80	125	175	225	275	350	450	1	5	15	30	60	100	150	200	250	300	400	500
SMAW					9	10		11		12		13	14											
MIG (heavy)								10	11		12		13	14										
MIG (light)								10	11	12	13	14	15											
TIG, GTAW				9	10	11	12		13		14													
MAG / CO ₂						10	11	12		13		14	15											
SAW								10	11	12	13	14	15											
PAC									11	12		13												
PAW			8	9	10	11	12		13		14		15											

NOTE:
SMAW - Shielded Metal Arc Welding
MIG (Heavy) - MIG on Heavy Metals
MIG (Light) - MIG on Light Alloys
TIG, GTAW - Gas Tungsten Arc Welding
MAG / CO₂ - Metal Active Gas
SAW - Shielded Semi-Automatic Arc Welding
PAC - Plasma Arc Cutting
PAW - Plasma Arc Welding

MAINTENANCE

Replace the front cover lens

Replace the front cover lens if it is damaged (cracked, scratched, dirty or pitted). Place your finger or thumb into the recess at the bottom edge of the window and flex the window upwards until it releases from one edge (See fig.5).

Replace the inner cover lens

If it is damaged (cracked,scratched,dirty or pitted).

Changing the auto darkening filter

(See figs.5a & 5b).

Installing new auto darkening filter

Take the new auto darkening filter and pass the potentiometer cable under the wire loop before dropping the auto darkening filter into its retaining frame inside the helmet. Press down the wire loop clip and ensure that the front edge of the loop is properly retained under the retaining lugs as shown in fig.5b.

Fasten the potentiometer to the inside of the helmet with the shaft protruding through the hole. Push the shade control knob onto the shaft.

Cleaning

Clean helmet by wiping with a soft cloth. Clean the auto darkening filter surfaces regularly. Do not use strong cleaning solutions.Clean sensors and solar cells with methylated spirit and a clean cloth and wipe dry with a lint-free cloth.

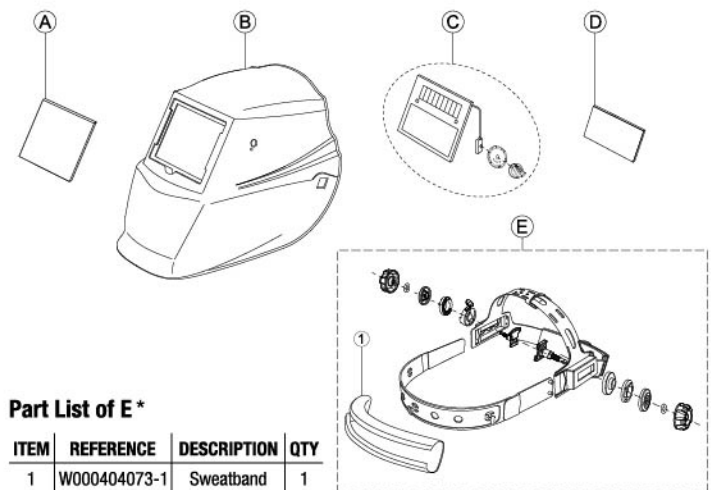


TECHNICAL SPECIFICATIONS



EUROONE	
Model No.	ADF600SLE
Optical class	1 / 1 / 1 / 2
Viewing area	98.00 x 44.00 mm
Size of cartridge	110.00 x 90.00 x 9.00 mm
Lens shade	9-13 Variable
Light State	Shade 3.5
Shade control	External
Sensors	2
On/Off	Automatic
UV/IR Protection	Up to Shade DIN 13 at all times
Power Supply	Solar cells, no battery change required
Switch time	1/16,000 sec. from Light to Dark at 55 °C
Sensitivity Control	adjust by infinitely dial knob
Delay time(dark to light)	0.1-1.0 s by infinitely dial knob
Grind mode	External
Low TIG amps rated	≥10 amps /DC; ≥ 10 amps /AC
Operating Temperature	-5 °C~+55 °C
Storing Temperature	-20 °C~+70 °C
Application range	Stick Welding (DC&AC); TIG (DC,DC Pulse); TIG AC (Pulse), Excellent low amperage TIG response; MIG/MAG; MIG/MAG Pulse; Plasma Cutting/Welding; Grinding; Not for Laser Welding or Oxyacetylene Welding/Cutting
WARRANTY	1 year
Approval	CE, EN176, EN 379, EN166, UKCA, ANSI Z87.1, CSA Z94.3, AS/NZS 1338.1, EAC

PARTS LIST & ASSEMBLY



Part List of E *

ITEM	REFERENCE	DESCRIPTION	QTY
1	W000404073-1	Sweatband	1

Part List

ITEM	REFERENCE	DESCRIPTION	QTY
A	W000404065	Front Cover Lens (111.9×91.0×1.5 mm)	1
B	W000404066	Shell (Welding Mask TM9LE)	1
C	W000404067	Auto-Darkening Filter (ADF600SLE)	1
D	W000404068	Inside Cover Lens (95.9×47.2×1.0 mm)	1
E *	W000404069	Headgear Assembly (Including Sweatband)	1

WARNING

- The ADF shall only be used in conjunction with the inner cover lens.
- The eye-protectors against high speed particles worn over standard ophthalmic spectacles may transmit impacts, thus creating a hazard to the wearer.
- Toughened mineral filter oculars shall only be used in conjunction with a suitable backing ocular.
- If the symbols F or B are not common to both the ocular and the frame then it is the lower level which shall be assigned to the complete eye-protector.
- If the impact letter followed by letter "T", you can use it for protection against high speed particles at extremes of temperature. If the impact letter does not followed by letter "T", you should only use the eye protector for protection against high speed particles at room temperature.
- We recommend a use for a period of 5 years. The duration of use depends on various factors such as use, cleaning storage and maintenance. Frequently inspections and replacement if it is damaged are recommended.
- The product is in conformity with Directive 2001/95/EC, Regulation (EU) 2016/425 and Personal Protective Equipment Regulations (Regulation (EU) 2016/425 as brought into UK law and amended) and the harmonized / designated standards EN 166:2001, EN 175:1997 and EN 379:2003+A1:2009 necessary as brought into UK law and amended, Annex II.
- The user shall contact the health and safety representative to ensure he is given the proper protection by the personal eyewear during working conditions.
- The sensors should kept clean and unobscured.

MARKING

- The shell and the auto darkening filter are marked accordingly. Classification for eye and face protection is following EN 166:2001, EN 175:1997, EN379:2003+A1:2009.

Notified bodies:

DIN CERTCO Gesellschaft fuer Konformitaetsbewertung mbH, Alboinstrasse 56, 12103 Berlin, Germany - Notified body number 0196 (Shield)

TUV Rheinland UK Ltd Friars Gate (Third Floor), 1011 Stratford Road, Shirley, Solihull, B90 4BN United Kingdom - Approved body number 2571

ADF model ADF600SLE marking explanation: CE 4/9-13 LE 1/1/1/2/379

4 :	light state scale number	1 :	optical class
9 :	lightest dark state scale number	1 :	diffusion of light class
13 :	darkest state scale number	1 :	variations in luminous transmittance class
LE :	filter manufacturer identification	2 :	angle dependence of luminous transmittance class
		379 :	number of the standard

Marking on shield, model TM9LE: "LE EN 175 B CE". LE : manufacturer's identification. EN 175: number of this standard. B: resistance to medium energy impact

Marking on front cover lens: "LE 1 B CE". LE : lens manufacturer's identification. 1: optical class. B: resistance to medium energy impact

Marking on inside cover lens: "LE 1 B CE". LE : lens manufacturer's identification. 1: optical class. B: resistance to medium energy impact

EU DECLARATION OF CONFORMITY

1. Personal Protecting Equipment (PPE):

Welding helmets **EUROONE SERIES** composed by :

- Automatic welding filter, variable shade, ADF600SLE
- Face screen TM9LE
- **Safety lenses:** W000404665 / W000404668

2. Name and address of the Manufacturer:

Lincoln Electric Iberia S.L. Ctra. Laureà Miró 396-398
08980 Sant Feliu de Llobregat (Barcelona) Spain

3. This declaration of conformity is issued under the sole responsibility of the manufacturer:

Lincoln Electric Iberia S.L. Ctra. Laureà Miró 396-398
08980 Sant Feliu de Llobregat (Barcelona) Spain

4. Object of the declaration: EUROONE SERIES



Graphics May Vary

5. The object of the declaration described in point 4 is in conformity with the relevant Union harmonisation legislation:

(EU) 2016/425 (PPE)
2011/65/EU (ROHS)

6. References to the relevant harmonised standards used, or references to the other technical specifications, in relation to which conformity is declared:

EN 379:2003+A1:2009 "Essential requirements according to Annex II of Regulation 2016/425/EU"
EN 166:2001-04 "Essential requirements according to Annex II of Regulation 2016/425/EU"
EN 175:1997-08 "Essential requirements according to Annex II of Regulation 2016/425/EU"

7. the notified body(ies):

DIN CERTCO Gesellschaft fuer Konformitaetsbewertung mbH, Alboinstrasse 56,
12103 Berlin - GERMANY
Notified body number 0196

performed the EU type-examination (Module B) and issued the EU type-examination certificate(s)

N°C5961LE/R2 (W000404666 TML9LE)
N°C5216LE/R0 (W000404665)
N°C6024LE/R0 (W000404067 ADF600SLE)
N°C5217LE/R1 (KP3283-1/KP2897-1/KP2898-1/KP2931-1/KP3044-1/KP3323-1-CE + KP3053-1/W000404668)

8. the PPE is subject to the conformity assessment procedure: [for category III PPE only] Annex VIII (Module D)

9. Additional information:

The personal protecting equipment complies with listed European Directives and Regulations if used and maintained in accordance with enclosed instructions, applicable laws, standards and sound engineering practices. Any misuse and/or any modification render this declaration void.

Signed for and on behalf of Lincoln Electric



Marie-Faustine CAMPS
Accessories and Personal Protective Equipment Product Manager EMEAR

Done at Barcelona on 4th November 2022
Signed for and on behalf of: LINCOLN ELECTRIC IBERIA S.L.

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www.lincolnelectric.com

UK DECLARATION OF CONFORMITY

1. Personal Protecting Equipment (PPE):

EUROONE SERIES

2. Name and address of the Manufacturer:

Lincoln Electric Iberia, S.L.
C/ de Laureà Miró, 396 - 08980 Sant Feliu de Llobregat, Spain

Authorised Representative:

Lincoln Electric UK Ltd - Mansfield Road, Aston Sheffield S26 2BS, England

3. This declaration of conformity is issued under the sole responsibility of the manufacturer:

Lincoln Electric Iberia S.L. Ctra. Laureà Miró 396-398
08980 Sant Feliu de Llobregat (Barcelona) Spain

4. Object of the declaration: EUROONE SERIES



Graphics May Vary

5. The object of the declaration described in point 4 is in conformity with the relevant UK Statutory Instruments:

SI 2018 No. 390 (UK PPE)
SI 2012 No. 3032 (UK RoHS)

6. References to the relevant designated standards used, or references to the other technical specifications, in relation to which conformity is declared:

BS EN 379:2003+A1:2009
BS EN 166
BS EN 175:1997

7. the EU Notified Body(ies):

DIN CERTCO Gesellschaft fuer Konformitaetsbewertung mbH, Alboinstrasse 56,
12103 Berlin - GERMANY
Notified body number 0196

TUV Rheinland UK Ltd Friars Gate (Third Floor),
1011 Stratford Road,
Shirley, Solihull, B90 4BN
Notified Body for UKCA: 2571

performed the type-examination (Module B) and issued the type-examination certificate(s)

N°C5961LE/R2 (W000404666 TML9LE)
N°C5216LE/R0 (W000404665)
N°C6024LE/R0 (W000404067 ADF600SLE)
N°C5217LE/R1 (KP3283-1/KP2897-1/KP2898-1/KP2931-1/KP3044-1/KP3323-1-CE + KP3053-1/W000404668)
Gesellschaft fuer Konformitaetsbewertung mbH, Alboinstrasse 56, 12103 Berlin, GERMANY

8. Additional information:

The personal protecting equipment complies with listed UK Statutory Instruments if used and maintained in accordance with enclosed instructions, applicable laws, standards and sound engineering practices. Any misuse and/or any modification render this declaration void.

Signed for and on behalf of Lincoln Electric Iberia



Marie-Faustine CAMPS
Accessories Product Manager

Done at Sant Feliu de Llobregat (ES) , 01-01-2023

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