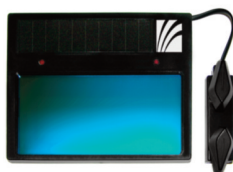# ArcOne®

USER INSTRUCTION MANUAL
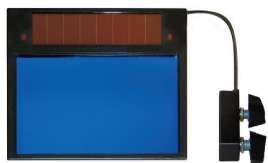### Python Helmet and Variable Shade Auto-Darkening Filters

5000V

5500V

6000V

7000VX

7500VX

iDF-48

85 Independence Drive, Taunton, MA 02780

TEL: (508) 884-9600 • TOLL FREE: (800) 223-4685 • FAX: (508) 884-9666

Visit our website and register at: www.arc1weldsafe.com

ArcOne® Auto-Darkening filters protect against harmful ultra-violet and infrared rays. All shades have maximum UV/IR protection. You will never burn your eyes due to optical radiation passing through the filter. User's eyes can be severely burned if welding with a damaged lens (cracked, pitted, etc.).

ANSI defines all welding helmets as secondary eye protection from optical radiation and impact. For complete safety, primary protection, such as spectacles or goggles, should be used in conjunction with welding helmets. Protective clothing and accessories such as leather bibs attached to the welding helmet will protect the user from spatter and optical radiation indirectly entering from areas behind the helmet.

ACGIH (American Conference of Governmental Industrial Hygienists) has established a TLV-TWA of 5mg/m3 for welding fumes. Welding fumes cannot be classified simply. The composition and quantity of both are dependent on the alloy being welded and the process and electrodes used.

Shade

6000V: Turn on the filter by pressing the "ON/Delay" button. Set the desired dark shade with the Shade knob on the outside of the helmet (see Figure 1a).

5000V, 7000VX, and iDF-48: Set the desired dark shade with the Shade knob on the outside side of the helmet (see Figure 1a). The shade value will be indicated on the LCD display (see Figures 1a and 1b). Note: The 6000V does not have a LCD display.

5500V and 7500VX: Set the desired dark shade by pressing the "M" mode button until "Shade" or the Shade icon is flashing, then use the "+" and "-" buttons to increase or decrease shade value (see Figures 2a and 2b).
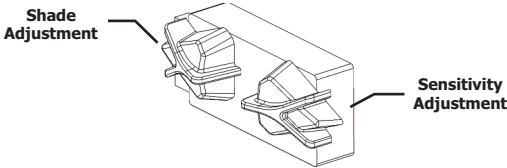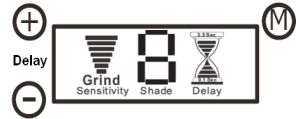

Figure 1a: External Controls

Figure 1b: Internal Controls

Sensitivity and Delay

These filters have arc detection sensitivity and delay. Delay mode is normally used in most welding applications except spot welding. Longer delay can be used at very low amps (<20A) to ensure filter stays dark.
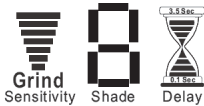

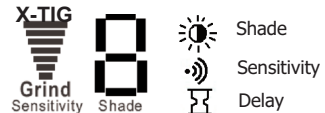**Figure 2a: LCD Readout**

Figure 2b: LCD Readout

6000V: Use the "Sensitivity" knob to set the sensitivity (see Figure 1a). To increase delay, after the filter has been turned on, press the "ON/Delay" button again to activate the Delay mode.

5000V and 7000VX: Change sensitivity with the "Sensitivity" knob (see Figure 1a). Increase delay by pressing the "+" button, decrease delay by pressing the "-" button. (see Figure 1b).

5500V and 7500VX: Press the "M" mode button until "Sensitivity" or the Sensitivity icon flashes, then use the "+" and "-" buttons to increase or decrease sensitivity (see Figures 2a and 2b).

iDF-48: Change sensitivity with the "Sensitivity" knob (see Figure 1a). Sensitivity Level is not displayed on iDF-48 LCD readout. Press the Delay button to change delay bars from 0.1 to 3.5 seconds (see Figure 3).
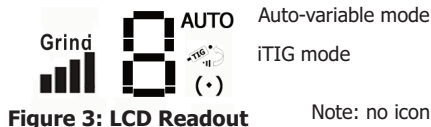

Figure 3: LCD Readout

AUTO — Auto-variable mode

iTIG mode

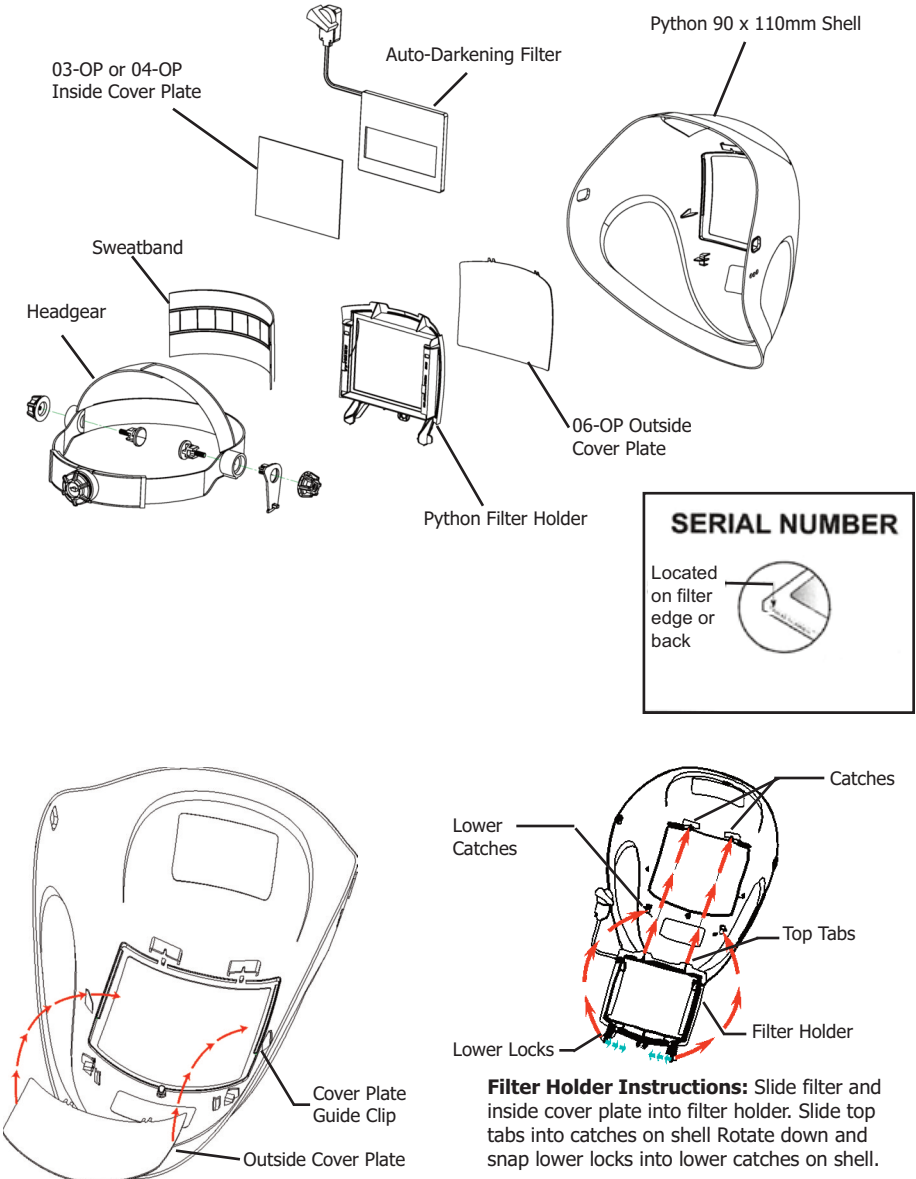Note: no icon for standard welding mode

Grind Mode

6000V: Press and hold the "ON/Delay" button to turn on the Grind mode. Press briefly to turn off the Grind mode.

5000V, 7000VX, and iDF-48: Turn the Sensitivity knob down until the LCD readout indicates "Grind" (see Figures 2a, 2b and 3).

5500V and 7500VX: Press the "M" mode button until "Sensitivity" or the Sensitivity icon is flashing, then press the "-" button until the LCD readout indicates "Grind" (see Figures 2a and 2b).

NOTE: Other modes will not work when in Grind mode.

Python Helmet Assembly

Python 90 x 110mm Shell

Auto-Darkening Filter

03-OP or 04-OP Inside Cover Plate

Sweatband

Headgear

06-OP Outside Cover Plate

Python Filter Holder

SERIAL NUMBER

Located on filter edge or back

Catches

Lower Catches

Top Tabs

Filter Holder

Lower Locks

Cover Plate Guide Clip

Outside Cover Plate

Filter Holder Instructions: Slide filter and inside cover plate into filter holder. Slide top tabs into catches on shell Rotate down and snap lower locks into lower catches on shell.

Intelligent Darkening Filter (iDF) Modes

The iDF-48 has three modes of operation: Standard, Auto-Variable, and iTIG. Switch modes by Pressing AND Holding down the "M" mode button until the desired mode icon is flashing.

Auto-Variable Mode: LCD displays "AUTO" (see Figure 3). Filter automatically responds to the intensity of the welding arc and sets the filter to the appropriate dark shade. The user can further adjust the dark shade up or down for comfort while the "(·)" flashes. The setting will be saved in a memory slot. This mode has 8 memory slots, one for each shade number 7 thru 14; i.e. shade 7 = memory 1, shade 8 = memory 2, etc. The user can reset all memory slots by Pressing and Holding both Mode and Delay buttons for two seconds.

iTIG Mode: LCD displays "TIG" icon (see Figure 3). While the "(·)" flashes, the user first sets the lower desired shade. After approximately five seconds of not turning the shade knob the flashing stops and the user can then set the desired upper shade. The user can reset memory by Pressing and Holding both Mode and Delay buttons for two seconds.

Care and Maintenance

Your new filter requires virtually no maintenance other than periodic cleaning when lens becomes dirty or clouded from smoke. **ArcOne**® Auto-Darkening Filters are water-resistant and may be cleaned by using a soft cloth with soapy water solution, or standard window cleaner. Welding helmet may be cleaned with soft cloth and soapy water. Do not submerge filter or welding helmet in water or solution. Store in original or similar packaging and store in a safe dry place away from direct heat between 14 - 100°F (-10 - 38°C).

iDF-48: The battery located in the external control center will last 3-6 months depending on usage. Replace with AA battery of same voltage (1.5 V).

WARNING! Using the wrong cover plates may damage your product, compromise UV/IR protection, and VOID WARRANTY. Use genuine **ArcOne**® replacement parts to ensure quality and fit.
NOTE: Change your cover plate when it loses its flexibility and/or becomes bowed or distorted. Clean any build-up from the area where the cover plate is retained.

Make sure there is no damage to the filter or helmet shell including, but not limited to cracks, holes, and melting. Do not use if damaged. Contact your distributor for replacement parts. Use only replacement components as specified for each welding helmet in accordance with this user manual.

<u>SPATTER DAMAGE IS NOT COVERED BY WARRANTY</u>
LIMITED WARRANTY

ArcOne® warrants all digital Auto-Darkening filters listed in this manual for three (3) years and all non-digital Auto-Darkening filters for two (2) years against all manufacturing defects resulting from materials or workmanship from the date of purchase. Proof of purchase establishing the date of sale and filter serial number must be provided, should a warranty claim be submitted. The purchaser's only remedy under this limited warranty shall be limited to **ArcOne**® sole operation to repair, replace or refund (not to exceed the purchase price). This limited warranty is not transferable from the original purchaser to a secondary owner. **ArcOne**® shall in no event be liable or responsible for any injury, damage or loss resulting either directly or indirectly from the use or misuse of this product. This limited warranty is exclusive and is in lieu of any other warranty implied either oral or written. Please read the instruction manual carefully to avoid certain situations which may void this limited warranty.

In the unlikely event that the Auto-Darkening filter malfunctions, the following procedures are to be used to receive efficient service and repair: Determine if the product is damaged from abuse or misuse. Any pitted marks on the filter possibly from spatter, chips, dents, or cracks, etc., are some indications of operator abuse. In the case of operator abuse the warranty is void.

RETURN PROCEDURE

1. Remove the Auto-Darkening filter from the helmet. Record the model number and serial number which are located on the filter edge or back. Also record the date of purchase from your sales receipt.

2. Contact **ArcOne**® Technical Support (800-223-4685) for a Return Tag Number and further instructions.

ArcOne® is a Division of A.C.E. International Company
85 Independence Drive, Taunton, MA 02780
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