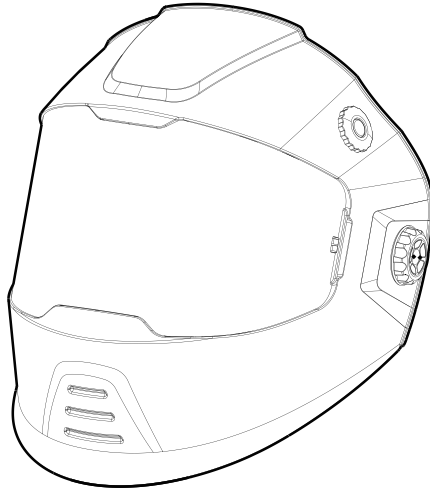


# Weldclass®



## OPERATING MANUAL FOR Promax 600 Series ELECTRONIC WELDING HELMETS



### **WARNING**

**THIS PRODUCT CONTAINS A BUTTON BATTERY**

If swallowed, a lithium button battery can cause severe or fatal injuries within 2 hours.

Keep batteries out of reach of children.

If you think batteries may have been swallowed or placed inside any part of the body, seek immediate medical attention.

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## 1 / BEFORE YOU START – IMPORTANT INFORMATION

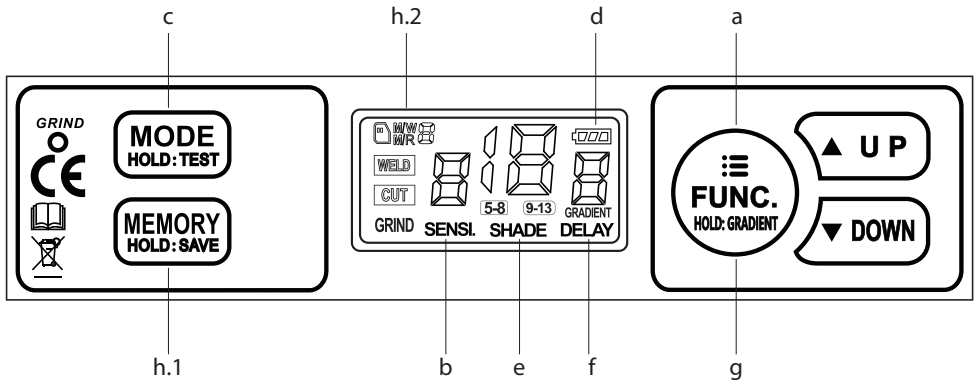
### **Warning: Incorrect use of this product may cause serious injury.**

- a. All users of this helmet should read & understand this manual before using the product
- b. Use this helmet only for the intended application as described in this manual
- c. Each time the helmet is used, it should be checked for correct operation: Use a cigarette lighter or strong light source to check that the lens is activating correctly.
- d. Stop welding immediately if the helmet filter/lens fails to darken when the arc is struck. Do not continue use until the malfunction has been rectified. Read this manual for further information and if in doubt, return the helmet to your Weldclass distributor for further inspection.
- e. This welding helmet does NOT provide unlimited protection. All appropriate PPE and safety-wear must be worn, and safe work practices must be followed at all times, in accordance with applicable industry OH&S regulations. Arc rays can burn eyes and skin. Fumes and Gases can be hazardous. Noise can damage hearing. Flying particles can cause impact injury or death.
- f. Never use the helmet without the outer & inner cover lenses correctly installed. Failure to do so will damage the Auto-darkening filter & void warranty.** Always keep clear cover lenses clean and replace them regularly. Dirty or scratched cover lenses may cause the auto-darkening filter to malfunction.

## 2 / SPECIFICATIONS

	<b>Promax 600</b>	<b>Promax 650</b>
Suitable Applications	MIG, MMA (stick), TIG, Plasma Cutting, Oxy Cutting (Brazing, Arc Gouging)	
TIG Suitability	5 amps or more	
Optical Class	V2 (1/1/1/2)	V1 (1/1/1/1)
Switching Speed	Conforms to & exceeds the requirements of AS/NZS1338.1 & ISO16321-2	
Sensors	4	
Power Supply	2 x CR2450 replaceable battery (assisted by Solar panels)	
On / Off	Ready to weld at any time – no switching required	
Low Battery Indicator	Battery level indicator on Digital Screen	
Inactive Shade Level (Grind/Off)	3	
Active Shade Level (Weld)	4-8 / 9-13	
Sensitivity Adjustment	Low - High (9 levels)	
Delay Adjustment	Min 0.04 sec – Max 2.0 sec with Gradient function	
Grinding Mode	Yes, internal	Yes, internal and external push button
Operating Temperature	-10°C to +60°C	
Storage Temperature	-25°C to +65°C	
Weight	562 g	568 g
Viewing Area	108x74 mm	108x82 mm
Outer Cover Lens Dimensions	178x130mm	
Inner Cover Lens Dimensions	114x90 mm	
ADF/Cassette Dimensions	145x105x26mm	
Magnification Lens Holder	Internal – takes standard 108x51mm magnifications lenses	
Standards Compliance - Shell	AS/NZS1337.1 High Impact	
Standards Compliance – Auto Darkening Filter/Lens	AS 1338.1, ISO 16321-2, ANSI Z87.1, CSA Z94.3	

### 3 / AUTO-DARKENING FILTER/LENS (ADF) CONTROLS & FEATURES



Note: ADF = Auto-Darkening Filter/Lens

#### a. FUNCTION BUTTON (FUNC.)

This scrolls through Sensitivity, Shade and Delay settings. Press the Up and Down buttons to adjust the Function that is flashing. Once adjusted, wait for the setting to stop flashing to store the new value.

#### b. SENSITIVITY CONTROL (SENSI)

This adjusts the sensitivity of the arc sensors to best suit the welding task & surrounding environment. Low sensitivity helps prevent the ADF from reacting to other nearby light sources. High sensitivity may be required if welding on low current &/or when TIG welding. Low to mid sensitivity is recommended for most welding applications.

#### c. MODE BUTTON

This changes between WELD 9-13, WELD 4-8, CUT, and GRIND modes. Also, press and hold this button to test/check ADF is operating correctly.

Grind Mode locks the ADF to "off" (Shade 3). If helmet has eternal grind button, holding this for 3 sec will also turn grind mode on or off.

Cut Mode locks the ADF to the set shade level.

#### d. BATTERY LEVEL INDICATOR

### 3 / AUTO-DARKENING FILTER (ADF) CONTROLS & FEATURES – Cont'd

#### e. SHADE ADJUSTMENT (SHADE)

The following chart shows recommended shade levels for different welding applications.

Welding Application	Arc Current in Amps	Protective Shade No.
Stick Electrode (MMA)	Less than 40	9
	40-80	10
	80-175	11
	175-300	12
	300-500	13
MIG	Less than 100	10
	100-175	11
	175-300	12
	300-500	13
TIG	Less than 50	8-10
	50-100	11
	100-200	12
	200-400	13
Air Carbon Arc Gouging	Less than 500	12
	500-700	13
Plasma Arc Cutting	Less than 80	8-9
	80-150	10-11
	150-350	12-13
Gas Welding & Cutting	-	4-6

#### f. TIME DELAY ADJUSTMENTS (DELAY)

This adjusts the time the ADF switches from dark back to light when welding stops. A short delay time is best for tack welding and short welds. A longer delay may be required if welding heavier materials, where the welding pool emits bright light for a brief period.

#### g. GRADIENT DELAY

Activate this by pressing the FUNC. Button for 2 seconds.

When this is active the shade will decrease from your preset shade setting to shade 3. This is best used for welding heavier materials so you can monitor the weld as it cools.

#### h. MEMORY SAVE

.1 - You can save up to 10 of your favourite settings.

.2 – M/R = Memory Recall, this will display when you are trying to Recall a saved Memory setting. M/W = Memory Write, this will display when you are Saving a Memory Setting. The Number represents the Memory number slot you are saving to or recalling. Use the Up and Down buttons to scroll through the memory Slots. Wait for 5 seconds after selecting the desired memory slot to save or recall these settings.

## 4 / REPLACING ACCESSORIES & MAKING ADJUSTMENTS

### REPLACING BATTERIES

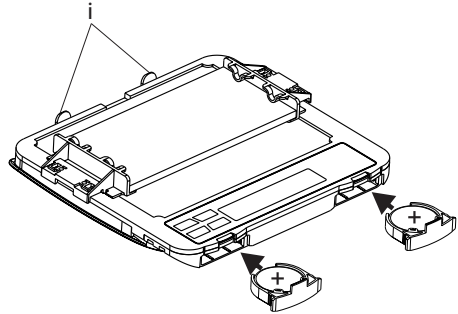
When the batteries have become discharged. You can view the battery level status on the Digital Display (h).

Remove the Front cover lens before removing the ADF. For the Promax 650 also remove the Grind Switch by unscrewing the button retainer ring and pushing the button into the inside of the helmet.

Remove the ADF by pressing down on the 2 tabs (i) at the top of the ADF while simultaneously pressing the ADF forwards out of the front of the helmet.

Remove the screws holding the battery holders in place and remove the holders.

Reverse these steps to re-assemble the helmet once new batteries are installed.



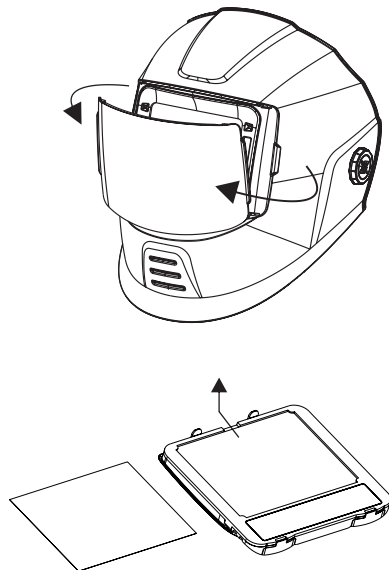
### REPLACING COVER LENSES

Replacing Front Cover Lens: Firmly pull 1 side of the Cover lens forwards. Once 1 side is released the other side will come free.

Replacing Inner Cover Lens: Using the access point at the top of the ADF, pull the lens backwards so the lens bends and the corners release from their holders.

NOTE: If you have the mag lens holders installed, you may need to remove the whole cassette first. (see instructions in a Replacing Batteries)

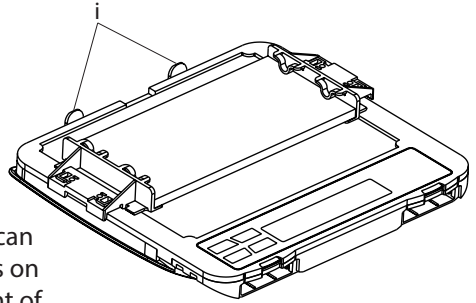
IMPORTANT: Use only original Weldclass cover lenses to ensure correct fit and conformance to safety standards.



## 4 / REPLACING ACCESSORIES & MAKING ADJUSTMENTS – Cont'd

### INSTALLING A MAGNIFICATION LENS

Install the 2 Magnification Lens holder clips (supplied as separate parts with helmet) to the mounting positions on either side of the viewing window. These will click firmly into place.



Any standard 108x51mm magnification lens can be fitted by inserting it into the retaining tabs on the inside of the lens retainer frame (j), in front of the viewing window.

Note: To prevent fogging, place the flat side of the magnification lens towards the ADF (auto-darkening filter/lens).

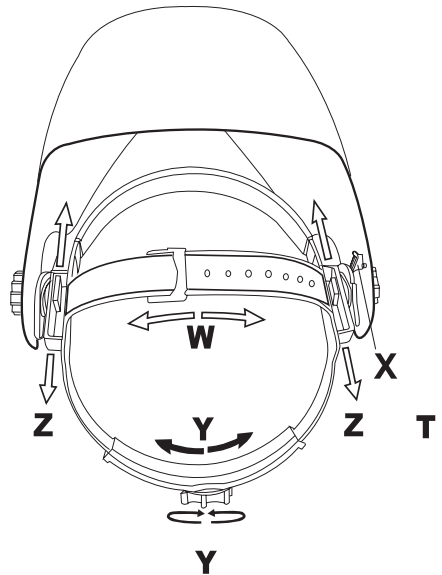
### HEADGEAR ADJUSTMENT

**Tightening Knob (Y):** Expands or contracts the main headband. Turn the knob clockwise to tighten, and anti-clockwise to loosen.

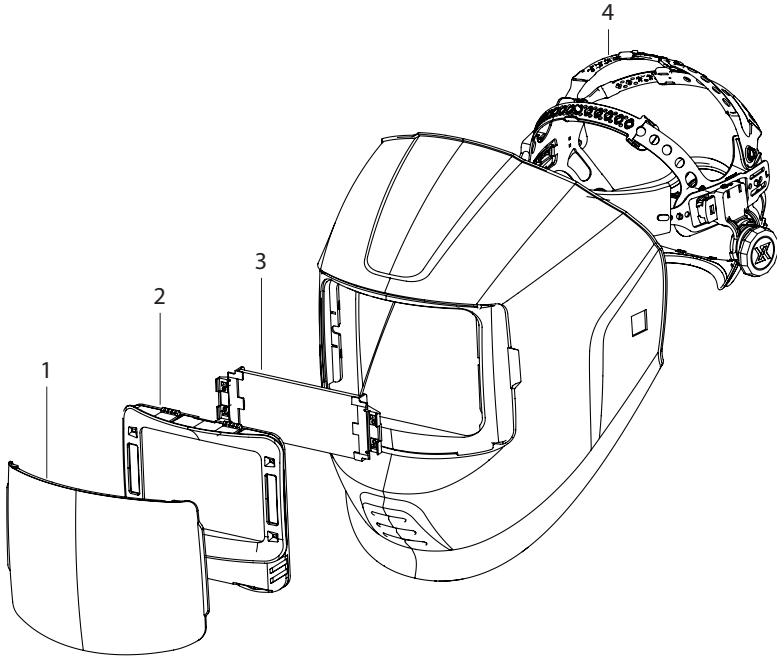
**Top Strap (W):** Adjust the strap buckle according to personal preference & head size.

**Tilt Angle (X):** The locating pin on the right side of the helmet can be moved to different positions to adjust the tilt angle of the helmet when it is resting in the lowered position.

**Horizontal Position (Z):** Adjusts the distance of the helmet from the operator's face. Loosen the headgear retaining nut to change position (front, centre or rear). The same position should be selected on both sides.



## 5 / SPARE PARTS



REF	DESCRIPTION	PART NO
1	Outer Clear Cover Lens Pkt 3	WC-05351
2	Auto-Darkening Filter Cassette (ADF) Promax 600	WC-05346
	Auto-Darkening Filter Cassette (ADF) Promax 650	WC-05349
-	Inner Clear Cover Lens Pkt 5	WC-05350
-	Sweat Band Pkt 5	WC-01630
4	Headgear Assembly	WC-05353
-	Battery (CR2450) (Not pictured)	WC-02640
3	Magnification Lens 1.5x	P7-ML15
	Magnification Lens 2.0x	P7-ML20
	Magnification Lens 2.5x	P7-ML25



## 6 / MAINTENANCE

The helmet and ADF must be checked regularly. Defective equipment should not be used. Parts that are broken, missing, worn, distorted or contaminated, should be replaced immediately.

- a. Inspect lenses frequently. Immediately replace any scratched, cracked, or pitted lenses as they may impair visibility and reduce protection.
- b. Inspect Helmet Shell and Harness Assembly frequently. Replace any damaged or worn components immediately.
- c. Keep the Sensors and the Solar Panel clean at all times. When cleaning the Welding Helmet or Filter Lens do not use solvents or abrasive cleaning agents. Clean with a soft cloth after use.

## 7 / TROUBLESHOOTING

<b>FAULT</b>	<b>POSSIBLE CAUSES</b>	<b>POSSIBLE REMEDY</b>
The Filter Lens does not activate at all (fails to darken)	Batteries are discharged	Replace Batteries
	Batteries are not fitted correctly	Check batteries (see section 4)
	Battery or terminals are dirty	Inspect & clean battery/terminals
The Filter Lens flickers or intermittently fails to darken	Front Cover Lens is dirty or scratched & is obstructing the sensors	Replace cover lens
	Sensors are dirty	Clean the Sensors with a soft cloth
	Sensitivity too low	Increase sensitivity level
	Momentary disruption to sensing of the arc	Increase delay time adjustment (will help compensate for momentary disruptions)
Filter lens is dark when no arc is present or stays dark after the weld is extinguished	The ambient light level is too bright	Reduce the ambient light level in the area
	Sensitivity too high	Reduce sensitivity level

## 8 / WARRANTY

Warranty period;

See [www.weldclass.com.au/warrantyinfo](http://www.weldclass.com.au/warrantyinfo) for warranty period information.

The WELDCLASS® Promax Series Welding Helmets are warranted against faulty components and manufacturing defects in the auto-darkening filter (ADF) for the warranty periods indicated.

The warranty period begins on the date of purchase. It is the sole responsibility of the owner of the helmet to retain proof of purchase (i.e. a copy of the invoice made out by the distributor or reseller to the owner of the helmet clearly showing the purchase date). Proof of purchase must be provided in the event of any warranty claim.

a. Warranty Includes and Covers:

1. The ADF
2. Manufacturing faults that do not allow the ADF to perform the functions for which it was designed.

b. Warranty Excludes / Does Not Cover:

1. Helmet parts other than the ADF, including: shell and headgear
2. Warranty claims made without proof of purchase, or warranty claims made with proof of purchase that is deemed by Weldclass Welding Products to be false, misleading, incomplete or insufficient.
3. Defects or damage resulting from: misuse, accidents, neglect, improper maintenance, alteration/modification, use of the helmet contrary to the applications for which it was designed, or failure to heed any of the instructions, warnings or guidelines issued with the helmet, spare parts or accessories that are not genuine Weldclass.
4. Filters that have been used without cover lenses or have spatter damage or are scratched or cracked.
5. Damage incurred in transport
6. Operator error, misunderstanding or use contrary to the intended purpose
7. Warranty claims made where the owner/operator of the helmet is not willing or not able to provide any information required by Weldclass Welding Products to process the warranty claim.
8. The cost of freight involved in transporting parts in the event of a warranty claim.

This is a repair and/or replacement warranty only and does not allow for a refund. Weldclass reserves the right to replace faulty units covered under warranty with alternative / equivalent units should the original unit become obsolete or unavailable. No other warranty is expressed or implied. This warranty is exclusive and in lieu of all others, including, but not limited to any warranty of merchantability or fitness for any particular purpose. Weldclass shall not under any circumstances be liable for special, indirect or consequential damages. No employee, agent, representative, distributor or agent of Weldclass is authorised to change this warranty in any way or grant any other warranty. Notwithstanding the foregoing, in no event shall the warranty period extend more than the stated warranty period plus 6 months from the date Weldclass delivered the product to the authorised distributor. Warranty is always dated from original date of purchase - if warranty repairs are made or if warranty replacements are given this does not extend the warranty period.



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[www.weldclass.com.au](http://www.weldclass.com.au)