

To set the shade level, switch the lens ON by pressing the ON button.

Once switched ON the lens will become clear, if the lens remains dark and the 'low bat' warning lamp flashes, DO NOT USE THE SHIELD. Contact your local HSS Hire for a replacement unit.

The lens will automatically switch OFF after 30 minutes of non-use or you can manually switch it OFF by pressing the ON button for a few seconds.

Using the chart, set the shade number by turning the shade control dial.

There are two shade ranges, gold which is automatic and red which has to be adjusted manually for sensitivity.

Ideally you should set the shade using the gold range but if using low amps or a very stable arc is being produced, use the red settings and adjust the sensitivity as necessary.

The lens will remain clear until an arc light is detected, upon which the lens is activated to give the protective shading you have selected.

CONNECTING THE UNIT TOGETHER...

Connect one end of the air pipe onto the back of the helmet then fit the other end of the air pipe onto the blower (simply push and turn) unit.

The air-feed welding mask is now ready to use.

## **BASIC TECHNIQUES**

If the equipment fails, or any part is damaged, return it. Do not continue to use or attempt to repair it yourself. Fit the belt, complete with blower unit, so that the

Fit the belt, complete with blower unit, so that the blower unit sits to the rear.

Now switch the blower and lens ON and fit the helmet ensuring the snood is pulled down under your chin.

Only switch OFF and remove the equipment away from the work area.

## **EQUIPMENT CARE**

Never push the equipment beyond its design limits. If it will not do what you want, assume you have the wrong type of equipment for the job. Ask at your local HSS Hire for advice.

The welding masks lens is protected by two polycarbonate protection plates, one fitted inside the mask and one fitted outside. If either protector is missing or becomes damaged do not use the mask. Contact your local HSS Hire depot for a replacement.

**Handle the equipment with care.** Avoid dropping it, knocking it, or otherwise exposing it to damage.

Never subject this equipment to prolonged exposure to excessive moisture, or dangerous/corrosive chemicals.

**Keep the equipment clean.** You will find this less of a chore if you clean up regularly rather than wait until the end of the hire period.

When not in use, store the equipment in its carry bag somewhere clean, dry and safe from thieves.

#### **FINISHING OFF**

Switch the blower unit OFF, remove the helmet and belt, then switch OFF the lens.

Disconnect the air pipe from the helmet and blower unit, then place everything in the carrying case ready for return to your local HSS Hire.

Recommen	Recommended shade numbers according to BS 679, DIN 4647-1 and EN 169	accordir	ng to BS	679, DI	N 4647-1	and EN	169
Wolklay Drong		Curre	Current in Amperes	peres			
welding Process	0.5 1 2.5 5 10 15 20	39 40 69 8	0 100 125 1	50 175 200 <sup>22</sup>	80 100 <sup>125</sup> 150 <sup>175</sup> 200 <sup>225</sup> 250 <sup>275</sup> 300 <sup>350</sup> 400 <sup>450</sup> 500	350 400 450	200
Covered Electrodes		9 10	=		12	13	14
MIG on Heavy Metals		10	=		12	13	14
MIG Light Alloys		10	=	12	13	14	15
TIG on all Metals and Alloys	6	10 11	12	13	14		
MAG		10	=	12	13	14	15
Arc-Air Gouging			,-	11 11	12 13	14	15
Plasma Jet Cutting			=	12	13		
Microplasma Arc Welding	34 5 6 7 8 9 10	Ħ	12	13	14		15
2,5 According to th	$^{2.5}_{ m C}$ According to the conditions of use, the next greater or the next smaller scale number can be used	ıext greate	r or the ne	xt smaller	scale numk	oer can be	nsed.



## ... have you been trained

The law requires that personnel using this equipment must be competent and qualified to do so. Training available at HSS Training Solutions *0845 766 7799* 

# ...any comments?

If you have any suggestions to enable us to improve the information within this guide please e-mail your comments or write to the Safety Guide Manager at the address below e-mail: safety@hss.com

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Web Site: http://www.hss.com



An auto darkening welders helmet, which protects the uses from welding particles and gasses.



### **GENERAL SAFETY**

For advice on the safety and suitability of this equipment contact your local HSS Hire.

There is a serious risk of personal injury if you do not follow all instructions laid down in this guide.

The hirer has a responsibility to ensure that all necessary risk assessments have been completed prior to the use of this equipment.

Most welding tasks may be considered as hot work in site situations and may be subject to specific permits to work.

This equipment should only be used by an operator who has been deemed competent to do so by his/her employer.

This equipment should be used by an able bodied, competent adult who has read and understood these instructions. Anyone with either a temporary or permanent disability, should seek expert advice before using it.

Keep children, animals and bystanders away from the work area. Cordon off a NO GO area using cones and either barriers or tape, available for hire from your local HSS Hire.

Welding screens are also available for hire from your local HSS Hire.

Never use this equipment if you are ill, feeling tired, or under the influence of alcohol or drugs.

Wear the protective clothing and footwear required for the application, when using this equipment.

If the headshield or lens becomes damaged, return it to your local HSS Hire.

Ensure the work area is tidy, well lit and adequately ventilated. Lighting and ventilation equipment is available for hire, contact your local HSS Hire for advice.

DO NOT use this equipment in an explosive atmosphere. Never carry or pull the equipment by its air hoses.

## **Safety Test**

The following safety test must be performed before the beginning of each session of use i.e. first use of the day, after a coffee or lunch break.

Remove the air hose from the blower. Place the palm of your hand over the air outlet and switch the unit ON.

Because the airflow has been restricted the audible alarm (bleeper) will sound intermittently and the inner red LED will flash after approximately 15 seconds.

If the alarm does not sound, the unit MUST NOT BE USED, return it to your local HSS Hire.

If the equipment fails, or any part is damaged, return it. Do not continue to use or attempt to repair it yourself.

#### LIMITATIONS OF USE

THESE UNITS ARE NOT SUITABLE FOR ANY ENVIRONMENT, WHICH COULD BE IMMEDIATELY DANGEROUS TO LIFE OR HEALTH.

#### DO NOT USE:

- 1) In stills, tanks or other confined spaces.
- 2) For ANY use with ASBESTOS.
- 3) Outside the temperature range of –5 degrees C to +55 degrees C.
- 4) Where humidity levels exceed 95% RH.
- In atmospheres enriched or deficient in OXYGEN i.e. enclosed and unventilated areas. The required percentage of oxygen in air is between 19.5% and 21% OXYGEN.
- 6) Where excessive facial hair can interfere with the face seal and hence reduce protection afforded by this device.

The HSS Air-Feed Welding Mask will ONLY give protection against exposure to welding fumes. It offers a minimum protection factor of 50, that is to say that the air being delivered to the helmet is 50 times cleaner that the air outside.

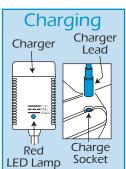
The unit is suitable for most welding applications but it must not be used during LASER welding processes.

This equipment is NOT suitable for use in hazardous environments and will give NO protection against toxic dusts, floor Seals, oil based paints, cellulose based paints and water based paints.

Where the user needs respiratory protection against hazards other than welding, contact your local HSS Hire for advice.

## **ELECTRICAL SAFETY**

The battery charger is designed to plug straight into a standard 230V 13A power socket.



The battery pack is designed to power the blower unit for up to 8 hours, with a re-charge period of 4 hours.

The battery pack should remain on the blower unit when recharging is required.

Plug the charger lead into the socket on the battery pack, then plug the charger into a suitable power supply and switch the power ON.

The red LED lamp will illuminate during charging,

once the battery is fully charged (charging will take up to 4 hours), the LED will flash to confirm that the battery is receiving a trickle charge.

If the equipment fails, or if its power supply cable or plug becomes damaged, return it. Never try to repair it yourself

**Keep cables out of harm's way**, and clear of the work area.

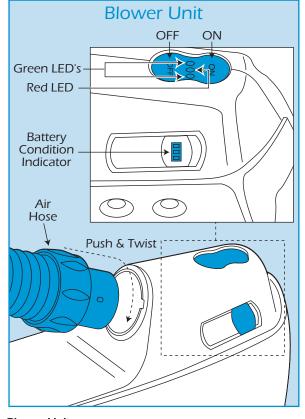
Extension leads should be fully unwound and loosely coiled, away from the equipment. Never run them through water, over sharp edges or where they could trip someone.

Keep the equipment dry, using electrical equipment in very damp or wet conditions can be dangerous.

To reduce the risk of electric shock, always use a RCD suitable RCD (Residual Current-Operated Device) available from your local HSS Hire. Or power the equipment from a mains circuit with a built in RCD.

Ensure the power socket is switched OFF before plugging into the power supply.

## **GETTING STARTED**



Blower Unit...

The unit has two fan speeds normal (160L per minute) and high (200L per minute), high speed should be selected if the work is producing a lot of radiant heat or on a hot day, this will help keep the operator cool.

There are three LED lamps between the ON / OFF buttons, the two outer LED's are green and the inner is red.

Press the ON button to switch the unit ON, a single green LED will illuminate and the fan will run at normal speed. Press the ON button a second time, both green LED's will illuminate and the fan will run at the high speed.

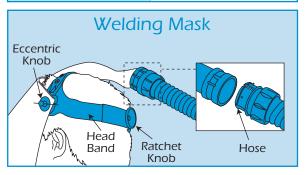
If the inner red LED illuminates and an audible warning is heard, the filters require replacing. If this happens, contact your local HSS Hire for an exchange unit.

To return the fan speed to normal, press the ON button again.

To switch the unit OFF, press the OFF button for a minimum of 1 second.

The battery level indicator illuminates 5 seconds after the unit has been switched ON. The three green LED segments alert the user to the battery's charge condition.

Lamp indication	Battery Condition
3 segments illuminated	80% -100% charge
2 segments illuminated	20% - 80% charge
1 segment illuminated	5% - 20% charge
1 segment flashing	Less than 5% charge
1 segment flashing +	STOP and recharge
audible alarm	the battery immediately



Welding Mask...

Check that both inner and outer polycarbonate protection plates are fitted to the mask (see EQUIPMENT CARE).

**Adjust the mask for correct fit and comfort,** carry out the following adjustments while wearing the mask.

To **adjust the headband** turn the ratchet knob at the back if the headband, clockwise to tighten anticlockwise to loosen.

To **set the angle of the shield** turn the Eccentric knob until the shield is in the most comfortable position.

The automatic lens shield shade level should be set to suit the welding application, before you use it.