



SIP Electronic Welding Headshield Powered Air Purifying Respirators

PAPR WR1000 02814 & PAPR WR2000 02815



User Manual

Please read and understand all instruction before use. Retain this manual for future reference.

Page No.	CONTENTS
1	SECTION 1: SAFETY PRECAUTIONS
	1 - 1 Symbols Used
	1 - 2 Arc Welding Hazards
5	SECTION 2: POWERED AIR PURIFYING RESPIRATOR
6	2 - 1 Respirator Specification
	2 - 2 Battery Charging
7	2 - 3 Installing the Battery
	2 - 4 Installing the Air Filter
8	2 - 5 Attaching the Air Flow Tube
9	2 - 6 Blower Unit Controls
	2 - 7 Air Flow Test
10	2 - 8 Testing the Air Flow Alarm
	2 - 9 Checking the Respirator Before Use
11	2 - 10 Putting on the Respirator
	2 - 11 Cleaning and Storage
12	2 - 12 Troubleshooting
	2 - 13 Warnings
13	2 - 14 Limitations of Use
14	SECTION 3: AUTO DARKENING WELDING HEADSHIELD
	3 - 1 Safety Warnings
	3 - 2 Headshield Specification
15	3 - 3 Headgear Adjustments
	3 - 4 Shade Control
16	3 - 5 Sensitivity Control
	3 - 6 Delay Control
17	3 - 7 Maintenance
	3 - 8 Troubleshooting
18	3 - 9 Parts List
20	EU - Declaration of Conformity
21	UK - Declaration of Conformity

SECTION 1-SAFETY PRECAUTIONS—READ BEFORE USING

 **Protect yourself and others from injury –read, follow ,and save these important safety precautions and operating instructions.**

1-1. Symbol Usage

 **DANGER!**-Indicates a hazardous situation which, if not avoided, will result in death or serious injury . The possible hazards are shown in the adjoining symbols or explained in the text.

NOTICE-Indicates statements not related to personal injury.

Indicates special instructions.



This group of symbols means Warning! Watch Out! ELECTRIC SHOCK, MOVING PARTS ,and HOT PARTS hazards. Consult symbols and related instructions below for necessary actions to avoid the hazards.

1-2. Arc Welding Hazards

 The symbols shown below are used throughout this manual to call attention to and identify possible hazards. When you see the symbol, watch out, and follow the related instructions to avoid the hazard. The safety information given below is only a summary of the more complete safety information found in the Safety Standards listed in Section 1-5. Read and follow all Safety Standards.

 **Only qualified persons should install, maintain, and repair this**

 **unit. During operation , keep everybody, especially children, away.**



ARC RAYS can burn eyes and skin.

Arc rays from the welding process produce intense visible and invisible (ultraviolet and infrared) rays that can burn eyes and skin. Sparks fly off from the weld .

- Wear a welding helmet fitted with a proper shade of filter to protect your face and eyes when welding or watching. Refer to Lens Shade Selection table in sections 1-3.
- Wear approved safety glasses with side shield under your helmet.
- Use protective screens or barriers to protect others from flash, glare, and sparks; warn others not to watch the arc.

- Wear protective clothing made from durable, flame-resistant material (leather, heavy cotton, and wool) and foot protection.
- Before welding, adjust the auto-darkening lens sensitivity setting to meet the application.
- Stop welding immediately if the auto-darkening lens does not darken when the arc is struck. See the Owner's Manual for more information.



WELDING HELMETS do not provide unlimited eye, ear and face protection.

Arc rays from the welding process produce intense visible and invisible (ultraviolet and infrared) rays that can burn eyes and skin. Sparks will fly off from the weld.

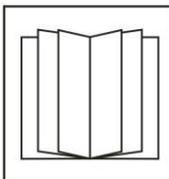
- Use impact resistant safety spectacles or goggles and ear protection at all times when using this welding helmet.
- Do not use this helmet while working with or around explosives or corrosive liquids.
- Do not weld in the overhead position while using this helmet.
- Inspect the auto-lens(Filter) frequently. Immediately replace any scratched, cracked, or pitted cover lenses or auto-lenses(Filter).



NOISE can damage hearing

Noise from some processes or equipment can damage hearing.

- Wear approved ear protection if noise level is high.



READ INSTRUCTIONS.

- Read and follow all labels and Owner's Manual carefully before installing, operating, or servicing unit. Read the safety information at the beginning of the manual and in each section.
- Use only genuine replacement parts from the manufacturer.
- Perform maintenance and service according to the Owner's Manuals, industry standards, and national, state, and local codes.



FUMES AND GASES can be hazardous.

Welding produces fumes and gases. Breathing these fumes and gases can be hazardous to your health.

- Keep your head out of the fumes. Do not breathe the fumes.

- If inside, ventilate the area and/or use local forced ventilation at the arc to remove welding fumes and gases.
- If ventilation is poor, wear an approved air-supplied respirator.
- Read and understand the Material Safety Data Sheets and the manufacturer's instructions for metals, consumables, coatings, cleaners, and degreasers.
- Work in confined space only if it is well ventilated, or while wearing an air-supplied respirator. Always have a trained watch-person nearby. Welding fumes and gases can displace air and lower the oxygen level causing injury or death. Be sure the breathing air is safe.
- Do not weld in locations near degreasing, cleaning, or spraying operations. The heat and rays of the arc can react with vapors to form highly toxic and irritating gases.
- Do not weld on coated metals, such as galvanized, lead, or cadmium plated steel, unless the coating is removed from the weld area, the area is well ventilated, and while wearing an air-supplied respirator. The coatings and any metals containing these elements can give off toxic fumes if welded.

RESPIRATOR (PAPR) MISUSE can be hazardous.

Welding produces fumes and gases. Breathing these fumes and gases can be hazardous to your health.

- Read and follow these instructions and the safety labels carefully. The powered air purifying respirator (PAPR) helps protect the user from specific airborne contaminants but must be used correctly to be fully effective. Have an industrial hygienist test the air in your facility to ensure the PAPR provides adequate protection from contaminants in your environment. If you have questions about the respirator, see equipment warning label and consult your Safety Director and a certified Industrial Hygienist.
- Follow all applicable EN / BS, and other regulatory guidelines pertaining to the use of respirators.
- Do not use the powered air purifying respirator where there is danger of fire or explosion.
- Do not use the powered air purifying respirator in windy conditions or negative pressure inside the hood may draw in contaminants from the outside air.
- Do not use the powered air purifying respirator without a properly installed spark guard cover. Without the spark guard cover, welding sparks may ignite the filter or damage the filters and allow unfiltered air into the helmet.
- The powered air purifying respirator does not supply oxygen. Use the respirator only in atmospheres for which it is EN / BS approved. Do not use the respirator where oxygen levels are 19.5% or lower, where contaminant levels are unknown or are immediately dangerous to life or health, or where the contaminant levels exceed the respirator specifications.
- Do not enter a hazardous area until you are sure the respirator equipment is correctly assembled, working properly, and properly worn.
- Before each use, inspect the respirator equipment for damage and verify it operates properly, Before using the respirator, test air flow to verify it is providing an adequate volume of air.
- Do not use the powered air purifying respirator without all filter components or with the blower turned off hazardous levels of oxygen and carbon dioxide may accumulate in helmet.
- Always wear the powered air purifying respirator when entering a contaminated area. Do not remove the respirator until outside the contaminated area.

- Dangerous contaminants may not smell or be visible. Leave the area immediately if you notice the following:

Breathing becomes difficult.

You experience dizziness, impaired vision, or eye nose, or mouth irritation.

The powered air purifying respirator alarm sounds.

The equipment is damaged.

Air flow decreases or stops.

If you think the equipment is not supplying adequate protection.

Do not remove the equipment until you are in a safe area.

- Do not repair, modify, or disassemble the powered air purifying respirator or use with parts or accessories not supplied by the manufacturer. Use only those components that are part of the approved assembly.
- Replace damaged or clogged filters. Do not wash or reuse filters. Do not clean filters by tapping or with compressed air or filter elements may be damaged. Dispose of used filter elements according to local, state, and federal requirements.
- The powered air purifying respirator must be used with the helmet, hood, and filters recommended by the manufacturer to provide a respirator system. See the label on the blower for information on the required equipment.
- Do not use the powered air purifying respirator belt or shoulder straps(if equipped) as a safety harness.
- According to EN 379.

Welding Process	Arc Current(Amperes)																			
	1.5	6	10	15	30	40	60	70	100	125	150	175	200	225	250	300	350	400	450	500
☉ SMAW					8			9		10		11		12		13		14		
☉ MAG					8			9		10		11		12		13		14		
☉ TIG	8			9			10		11		12		13							
☉ MIG(heavy)					9				10		11		12		13		14			
☉ MIG(light)					10				11		12		13		14					
☉ PAC					9				10		11		12		13					
☉ PAW	4	5	6	7	8	9	10	11	12											
Note	★ SMAW-Covered electrodes ★ MAG-Metal arc Welding ★ TIG-Gas Tungsten Arc Welding ★ MIG(Heavy)-MIG with heavy metals ★ MIG(light)-MIG with light alloys ★ PAC-Plasma jet cutting ★ PAW-Microplasma arc welding																			

Start with a shade that is too dark to see the weld zone. Then, go to a lighter shade which gives a sufficient view of the weld zone without going below the minimum.

SECTION 2 –POWERED AIR –PURIFYING RESPIRATOR (PAPR)

Production Description

This equipment helps protect the user from certain contaminants. All users must read and understand these instructions and be trained in the proper use of this equipment according to all applicable health and safety standards. If you have questions about the type of respiratory equipment required, consult your safety director and an industrial Hygienist. DO not enter a hazardous area until you are sure the respirator equipment is correctly assembled, working properly, and properly worn.

See Section 3 for information on the auto-darkening helmet assembly.

The powered air-purifying respirator (PAPR) filters contaminated air and blows it into the welding helmet hood through a flexible breathing tube. The respirator system generates a positive air pressure to help prevent contaminants from entering the hood. The system must include and/or be used with the equipment listed below:

- Helmet or helmet option with auto darkening lens, hood, and headgear system
- Air Flow Tube
- Blower assembly with filtration system (spark guard cover, foam pre-filter , HEPA filter), and battery level indicator.
- Belt assembly
- Air flow speed (Low and High) indicator
- Battery charger

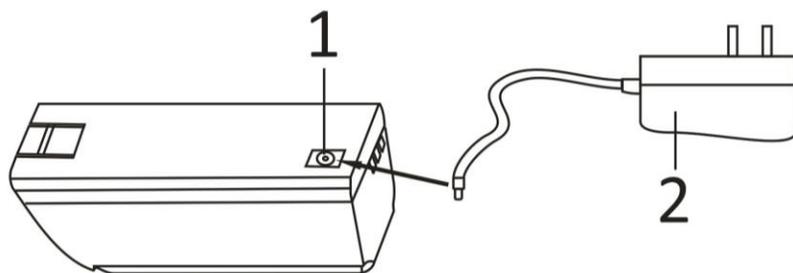
The respirator equipment operates at temperatures from -5°to 55°C and provides air flow of 170+ LPM (low speed) to 200LPM (high speed) under normal conditions. Battery life is reduced when the unit is used in dirty environment. if the system air flow decreases to an unsafe level, an alarm will sound, the blower vibrates, and the Danger light will flash to warn the users to immediately leave the contaminated area. Use the supplied air flowmeter to determine if the unit is supplying adequate amounts of clean air.

2-1. Respirator Specifications

Size(Blow Assembly)	192 x 190 x 101 mm
Weight	1.1kg (Blower Assembly, Filters, Belt, Shoulder Straps, and Battery)
Standard Air Filter	Filter Assembly consisting of Foam Prefilter, and HEPA Filter. Approved to Filter Particulate Down To 0.3 Micrometers In Size Filter classes: TH2P
Air Flow	Low Speed: 5.29 CFM (150 LPM) High Speed: 6.35CFM (180 LPM)
Operation Temperature	-5° to 55°C
Storage Temperature	-10° to 50°C
Storage humidity	≤90%R.H.
Battery Type	Rechargeable Lithium
Battery Charging Time	About 3 Hours
Battery Life	500 Charges - Run Time Dependent On Air Flow Rate and Filter Load.
Run Time:	up to 10 hours (Low Speed) up to 6 hours (high Speed)
System Alarm	85dBA@10cm

2-2. Charging The Battery

Please remove battery from blower assembly, Connect charge cord to battery terminal, connect charger to 110V-220V AC receptacle.



1. Battery Terminal
2. 110V-220V AC Battery Charger

⚠ Charge battery only with supplied charger in an open, well ventilated location.

⚠ Do not allow battery to get wet.

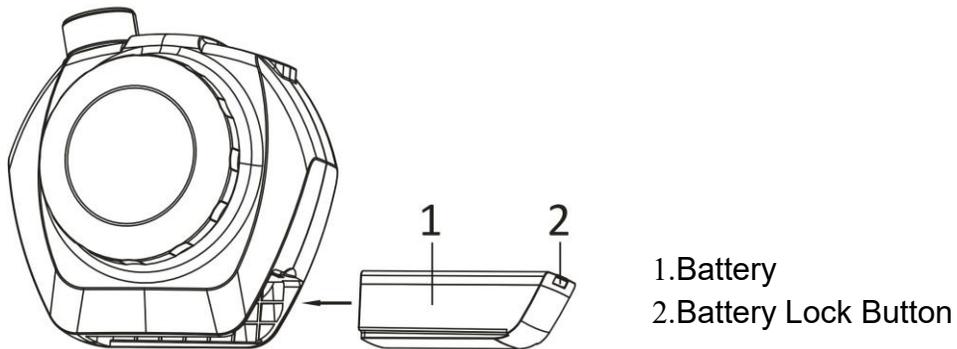
⚠ Do not attempt to open the battery case.

⚠ Keep battery away from fire or heat.

⚠ Charge battery before first use .

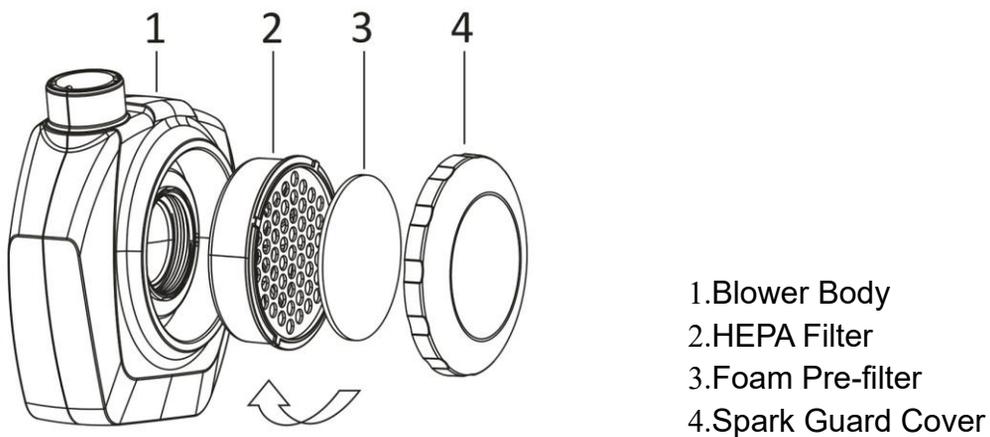
2-3. Installing The Battery

Slide the battery into blower body until battery snaps into position.



2-4. Installing The Air Filter

Install the HEPA filter into blow body. Install the Foam pre-filter above the HEPA filter. Push down the cover until it “clicks” into position as shown.



⚠ Do not use the respirator without the Cover, Foam Pre-filter and HEPA filter installed.

⚠ Replace damaged or dirty air filter. Do not wash filters, clean with compressed air, or reuse dirty air filters.

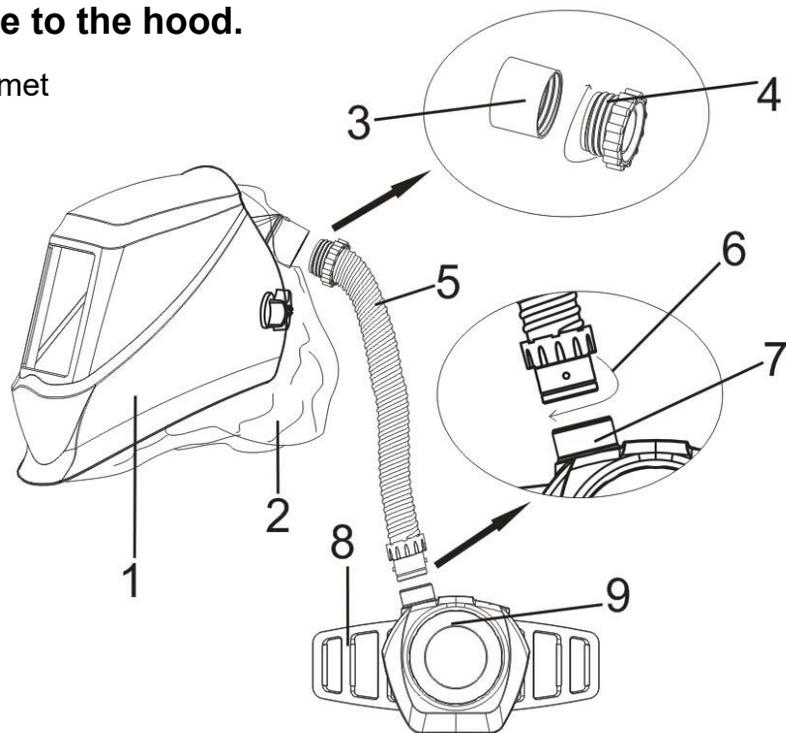
2-5. Attaching The Air Flow Tube

Connecting Air Flow Tube to the Blower unit.

Insert breathing tube terminal 2 into blower receptacle until snug and then turn connector 1/8 turn clockwise to lock the Air Flow Tube.

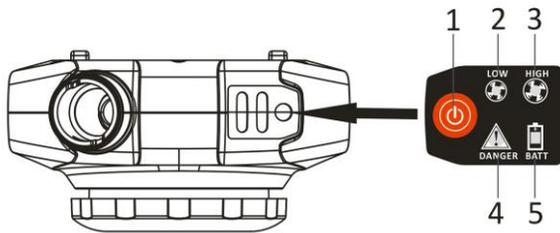
Connecting Air Flow Tube to the hood.

1. Auto-darkening welding helmet
2. Face seal
3. Headgear terminal
4. Air Flow Tube terminal 1
5. Air Flow Tube
6. Air Flow Tube terminal 2
7. Blower receptacle
8. Belt
9. Blower body



Insert the breathing tube terminal 1 into the headgear terminal and turn the tube clockwise until breathing tube locks in position.

2-6. Blower Unit Controls



1. On/Off Button
2. Low Speed Indicator
3. High Speed Indicator
4. Danger Indicator
5. Battery Level Indicator

To Start: Press On/Off button for 1 second until the blower starts. The Danger, Low Speed, High Speed Indicator lights goes on, then goes out, the alarm sounds, and the blower vibrates momentarily.

Then the blower always starts at the low speed position. Press the On/Off button to switch between Low Speed and High Speed.

To Stop: Press On/Off button 1 second until the audible alarm and blower stop.

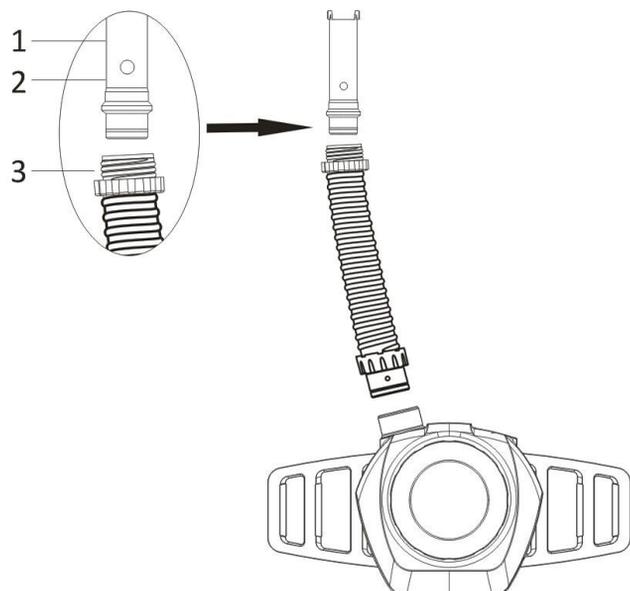
The Danger indicator light goes on ,the alarm sounds, and blower vibrates if battery volume is low or air flow is reduced due to a dirty filter, blocked breathing tube, or other problem.

The Battery Level indicator light shows the power remaining in the battery.

- Green light goes on:** battery level $\geq 90\%$
- Yellow light goes on:** $50\% \leq \text{battery level} < 90\%$
- Red light goes on:** $10\% < \text{battery level} < 30\%$
- Red light flash:** battery level $\leq 10\%$

2-7. Air Flow Test

Disconnect Breathing tube from hood. Insert flowmeter into breathing tube. Hold flowmeter straight up and start blower. The flowmeter ball should be above MIN mark. If flowmeter reads MIN or below, please check battery and filter elements .



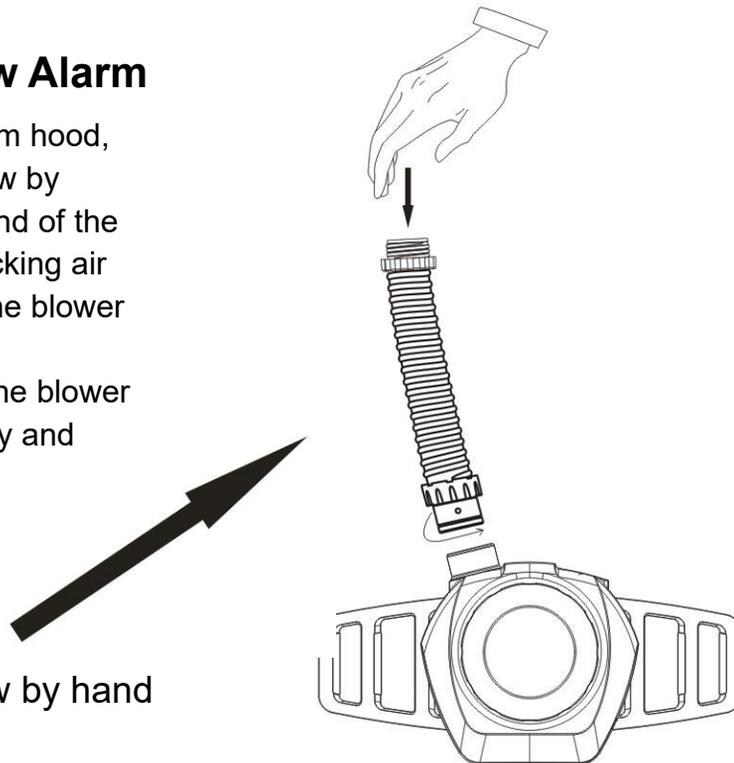
1. Flowmeter
2. MIN mark
3. Breathing Tube Connector

2-8. Testing Air Flow Alarm

Disconnect breathing tube from hood,
Start Blower and block air flow by
Placing your hand over the end of the
breathing tube. Continue blocking air
flow until alarm sounds And the blower
vibrates.

If alarm does not sound and the blower
does not vibrate, check battery and
filter element.

Blocking air flow by hand



2-9. Checking The Respirator Before Use

Before using the respirator, check the following items:

1 . Air Filter Assembly

Verify the air filter is suitable for the application. Also be sure the filter is undamaged, properly assembled, and securely connected to the blower assembly.

2.Air Flow Tube

Be sure the tube is undamaged and properly connected to the blower assembly and hood.

3.Battery

Verify the battery is fully charged and securely connected to the blower assembly.

4.Air Flow

Test air flow according to Section 2-8

5.Air Flow Alarm

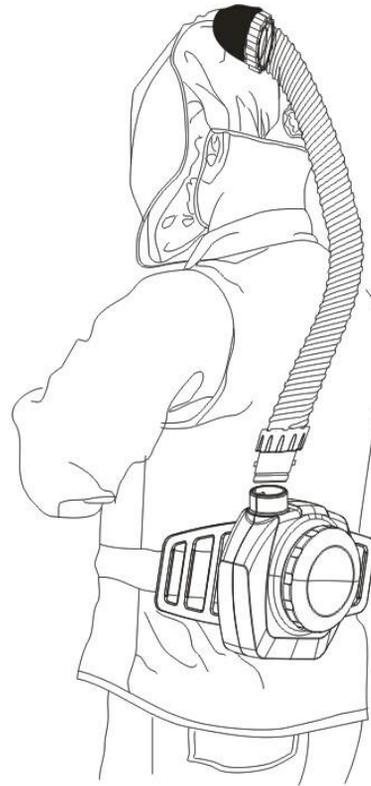
Turn on blower assembly and check for audible, visual, and vibratory alarms according to Section 2 - 9.

6.Face seal

Inspect the face seal and replace if damaged.

2-10. Putting On The Respirator

Place blower assembly against lower back with breathing tube extending upwards. Fasten belt around waist and adjust so as to make a comfortable fit.



2-11. Cleaning And Storage

2-12-1. Cleaning:

Detach the Battery pack, air flow tube and the blower. Inspect all parts for damage. Replace all damaged parts prior to storage or next use.

a. Blower: Clean the outer surfaces of PAPR assembly and battery pack with a soft cloth dampened in a solution of water and mild, pH neutral detergent. Do not immerse the blower or battery pack in water. Do not use solvents or abrasive cleaners. Do not attempt to clean the interior of the blower with compressed air or vacuum. Ensure the electrical contacts of the blower and battery pack are dry.

b. Air Flow tube: Clean the connection sites on the breathing tube with the water and detergent solution. The breathing tube can be immersed in water for cleaning. The inside of the tube must be completely dried prior to use or storage. Air dry, or dry by connecting to the blower unit and use it to force air through the tube until dry.

c. HEPA filter: Open the filter cover and inspect the HEPA filter. Replace if excessively dirty.

2-12-2. Storage:

If the blower will not be used for an extended period, remove the filter and battery and store them in a clean, dry, cool place free of solvent-based vapors.

2-12. Troubleshooting

Use the table below to help identify possible causes and corrective action for problems you may experience.

Fault	Possible Solution
Blower does not supply air to hood	<ol style="list-style-type: none"> 1.Press ON/OFF to start blower 2.Recharge battery 3.Verify battery is properly connected to blower 4.Remove blockage from blower outlet and breathing tube
Battery pack's charge lasts less than expected	<ol style="list-style-type: none"> 1.Ensure Battery pack is fully charged 2.Replace battery 3.Replace charger 4.Check the air filter(HEPA filter & Foam prefilter) ,and replace it if necessary
Blower cannot be turned off	Press ON/OFF button for one second
Battery red level light is flashing	Charge or replace the battery
Danger light is on, alarm sounds or blower vibrates	Check the blower air flow as section 2-9

2-13. Warning

- 1.This product is part of a system that helps protect against certain airborne contaminants
- 2.Do not use in flammable or explosive atmospheres. Doing so may result in serious injury or death.
- 3.Always correctly use and maintain the filter assembly. Failure to do so may reduce respirator performance, overexpose you to contaminants, and may result in sickness or death.
 - a. Inspect filter and bottom gasket before first installation of a filter, replace if damaged.
 - b. Always properly install the filter into the blower unit
 - c. Keep bottom sealing gasket clean
 - d. Never attempt to clean filter by knocking or blowing out accumulated material. Doing so will damage the filter media.
- 4.Failure to follow these User Instructions may reduce respirator performance, overexpose you to contaminants ,and may result in injury, sickness, or death.
 - a. Read and follow all User Instructions in order to ensure correct system operation.
- 5.Always correctly use and maintain the lithium ion battery packs. Failure to do so may cause fire or explosion or could adversely affect respirator performance and result in injury, sickness, or death.
 - a. Do not charge batteries with unapproved charges, in enclosed cabinets without ventilation, in hazardous locations, or near sources of high heat.
 - b. Charge in an area free of combustible material and readily monitored.
 - c. Do not immerse.
 - d. Do not use, charge, or store batteries outside the recommended temperature limits.

6. Dispose of lithium ion battery packs according to local environment regulation. Do not crush, disassemble, dispose of in standard waste bins, in a fire or send for incineration. Failure to properly dispose of battery packs may lead to environmental contamination, fire or explosion.

2-14 Limitation of Use

Do not wear this respirator system to enter areas where:

1. Atmospheres are oxygen deficient
2. Contaminant concentrations are unknown
3. Contaminant concentrations are Immediately Dangerous to Life or Health
4. Contaminant concentrations exceed the maximum use concentration determined using the Assigned Protection Factor for the specific respirator system

SECTION 3 – AUTO-DARKENING WELDING HELMET

3-1. SAFETY WARNINGS



The Solar-Powered Auto-Darkening Welding Helmet is suitable for most welding applications. This helmet comes with a 1/30,000-second switching time automatically darkens the lens the moment you start welding. No matter what shade the filter is set to, the UV/IR protection is always present.

3-1-1. ARC Rays can injure eyes and burn skin



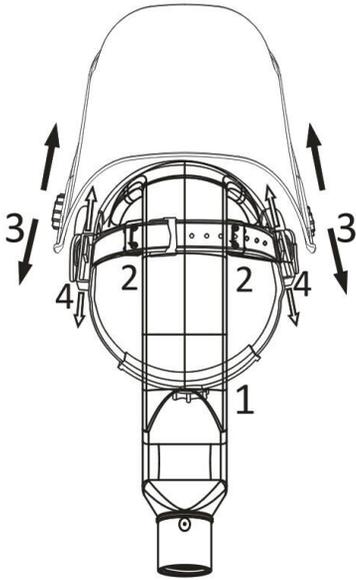
- Before welding, always inspect helmet and auto-darkening filter (ADF) to be sure they are fitted properly and in good condition.
- Keep the sensors, solar cell and filter lens clean. Clean the filter cartridge using a soapy water solution and soft cloth. Do not use solvents or abrasive cleaning detergent.

- Do not weld in the overhead position while using this helmet.
- Inspect the filter lens frequently and immediately replace any scratched, cracked, or pitted filter lens or cover lenses.
- Always wear safety glasses or goggles under the welding helmet, and protective clothing to protect your skin from radiation, burns and spatter.

3-2. SPECIFICATIONS

Model	02814 PAPR System 1	02815 PAPR System 2
Viewing Area	98x43mm	98x55mm
Cartridge Size	125x102x10mm	125x102x10mm
Arc Sensor	4	4
UV/IR Protection	UP to shade DIN 16 at all times	UP to shade DIN 16 at all times
Light State	DIN 4 (Grind)	DIN 4 (Grind)
Dark State	External, Variable shade 9-13	External, variable shade DIN5-8,9-13
Sensitivity Control	External, Low — High, by infinitely dial knob	External, Low — High, by infinitely dial knob
Switch Time	1/30,000S, from Light to Dark	1/30,000S, from Light to Dark
Delay Control	External, 0.1-1.0S, by switch button FAST-MID-SLOW, from Dark to Light	External, 0.1-1.0S, by switch button FAST-MID-SLOW, from Dark to Light
Power Supply	Solar cell and replaceable 2xCR2450 lithium batteries	Solar cell and replaceable 2xCR2450 lithium batteries
TIG AMP Rating	DC≥5, AC≥5	DC≥5, AC≥5
Operating Temperature	-5°C to +55°C	-5°C to +55°C
Storing Temperature	-20°C to +70°C	-20°C to +70°C
Other Functions	Grind Function: Low Voltage Indicator: Self-Test	Grind Cut Functions: Low Voltage Indicator: Self-Test

3-3. Headgear Adjustment



1. Adjust the headgear diameter with the twist knob on the back. The knob is locked until pushed in. Once unlocked, twist clockwise to tighten and counterclockwise to loosen.
2. Adjust the height by snapping the pin into the hole to lock securely in place.
3. To adjust the viewing angle, loosen the knob on both sides of the helmet and change angle locker to the desired tilt position (5 selection and positioned in the middle by default). Once achieving the desired angle, tighten the knobs until snug. The helmet should still swing up, but it should not drift downward when in place for welding.
4. To adjust the distance between the user's face and ADF, loosen the knobs on both sides of the helmet until the headband can move back and forth freely, reposition the headband at one of the 3 slots as desired (The headband is positioned in the middle by default)

This should be done one side at a time and both sides should be located at the same position for proper auto-darkening filter operation.

3-4. Shade Control

Select the shade DIN 9 to 13 based upon the welding process you will use by consulting the "Shade Guide Table" based on EN 379.

The variable shade control knob is for external adjustment. Grind mode DIN 4 prevents filter lens from auto-darkening for grinding use (02814).



Select the shade DIN 9 to 13 based upon the welding process you will use by consulting the "Shade Guide Table".

The variable shade control knob is for internal adjustment. The welding helmet can also be used to protect the face when cutting, shade DIN 5 to 8.

Grind mode DIN 4 prevents lens from auto darkening for grinding use (02815)



Shade Guide Table

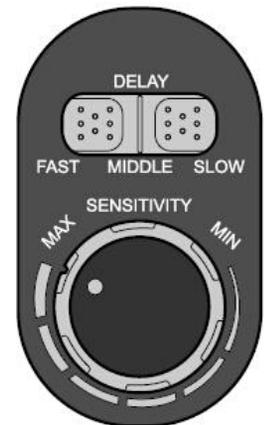
Welding Process	Arc Current(Amperes)																								
	1.5	6	10	15	30	40	60	70	100	125	150	175	200	225	250	300	350	400	450	500	600				
☉				8			9			10			11			12			13			14			
☉							8		9		10			11			12			13			14		
☉	8			9			10			11			12			13									
☉							9			10			11			12			13			14			
☉										10			11			12			13			14			
☉										9		10		11		12			13						
☉	4		5		6		7		8		9		10		11		12								
Note	★ SMAW-Covered electrodes									★ MIG(light)-MIG with light alloys															
	★ MAG-Metal arc Welding									★ PAC-Plasma jet cutting															
	★ TIG-Gas Tungsten Arc Welding									★ PAW-Microplasma arc welding															
	★ MIG(Heavy)-MIG with heavy metals																								

According to EN379.

3-5. Sensitivity Control

The sensitivity can be set from MIN to MAX by using the dial knob. The MIN setting suits excess ambient light or with another welding machine close by.

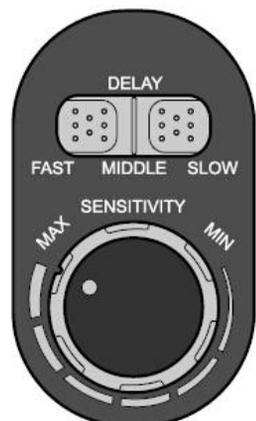
The MAX setting suits low amperage welding and welding in areas with low light conditions, especially low amperage TIG welding. Selections between MIN and MAX are suitable for most of indoor and outdoor welding operations.



3-6. Delay Control

When welding ceases, the viewing window automatically changes from dark back to light but with a pre-set delay to compensate. The delay time can be set from SLOW(0.8s) to MIDDLE(0.5s) to FAST(0.2s), by the DELAY switch.

The minimum delay suits spot or short welds. The maximum delay suits heavy current welding and reduces eye fatigue from the arc. Selections between SLOW-MIDDLE are suitable for most of indoor and outdoor welding operations.



3-7. MAINTENANCE

3-7-1. Front Cover Lens Replacement

Replace the front cover lens if it is damaged (cracked, scratched, pitted or dirty). Remove the old front cover lens by pressing two lock switches at the bottom of the retaining frame and pull the frame and ADF out. Take the old front cover lens out, and remove any protective film before installing the new one.

3-7-2. Inside Cover Lens Replacement

Replace the inside cover lens if it is damaged (cracked, scratched, pitted or dirty). Place your finger or thumb into the recess and flex the inside cover lens upwards until it releases from one edge. Then remove any protective film before installing the new one.

3-7-3. Batteries Replacement

When low voltage indicator (inside the helmet, on the left) turns red, you have to change battery. Slide cover plates and replace the old battery by a new CR2450. After that, put on cover plates.

3-7-4. Cleaning and Storing

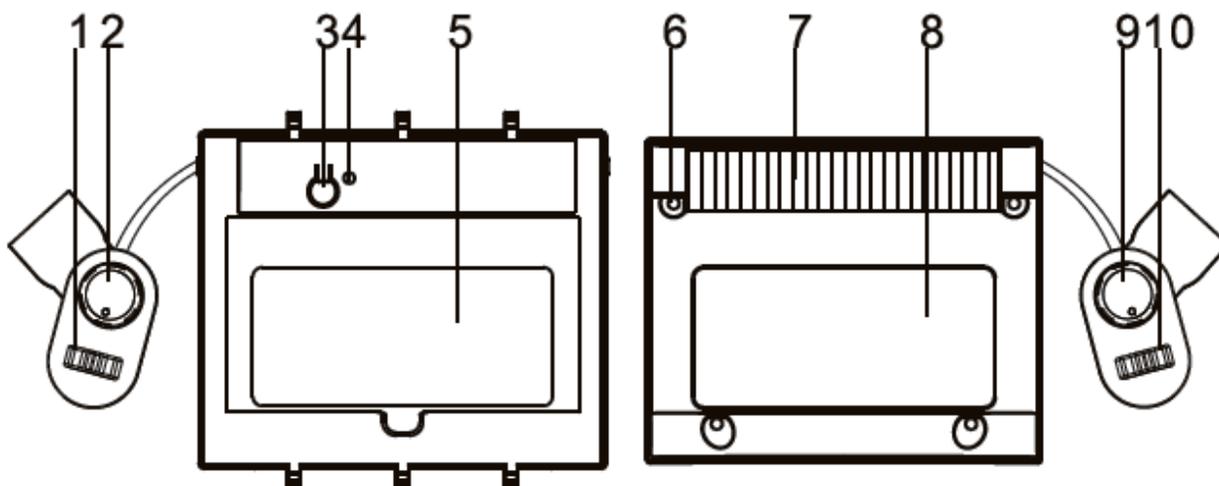
Keep the sensors, solar cell and filter lens clean. Clean filter cartridge and helmet shell by using a soapy water solution and soft cloth. Do not use solvents or abrasive cleaning detergent. Switch the product to Grind Mode and put it in a clean, dry location for storage.

3-8. TROUBLE SHOOTING

PROBLEM(S)	POSSIBLE CAUSE(S)	SUGGESTED SOLUTION(S)
Difficult to see through filter	Cover lens dirty	Clean or replace cover lens
	Filter lens dirty	Clean filter lens
Filter does not darken when arc is struck	Grind or Cut Mode Selected	Adjust Shade from 9 to 13
	Sensors or Solar Panel blocked	Make sure sensors or solar panel are exposed to weld arc without blocking
	Set Sensitivity to MIN	Adjust Sensitivity to required level
	Low voltage of lithium battery	Replace with new lithium battery if indicator turns red
Filter darkens without arc	Set Sensitivity to MAX	Adjust Sensitivity to required level
Filter remains dark after welding	Set Delay to FAST	Adjust Delay to required level

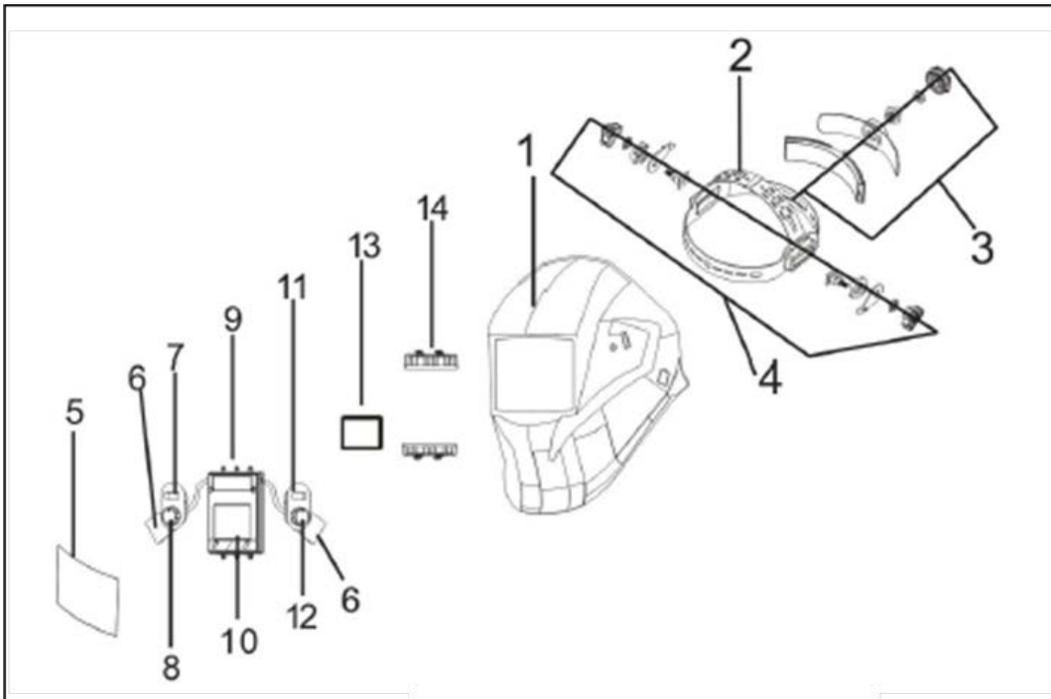
3-9. PARTS BREAKDOWN

3-9-1 Parts List – 02814 / 02815



Model	02814	02815
Part #	Description	Description
1.	Weld/ Grind Switch	5-8/9-13 Switch Knob
2.	Shade knob	Shade knob
3.	Self-test button	Self-test button
4.	Low volume alarm	Low volume alarm
5.	LCD	LCD
6.	Arc sensor	Arc sensor
7.	Solar panel	Solar panel
8.	UV/IR Filter	UV/IR Filter
9.	Sensitivity Control Knob	Sensitivity Control Knob
10.	Delay time switch	Delay time switch

3-9-2. Parts List – whole product



Part #	Description
1.	Helmet Body
2.	Headgear Top Adjustment
3.	Headgear Tightness Adjusting Konb
4.	Headgear Angle&Distance Adjusting Konb
5.	Front Cover Lens
6.	Battery Compartment
7.	Delay Time Control
8.	Sensitivity Control
9.	Filter Cartridge
10.	LCD
11.	Weld&Grind Control
12.	Variable Shade Control
13.	Inside Cover Lens
14.	Filter Fixture Holder

EU - DECLARATION OF CONFORMITY

Declaration of Conformity

We

SIP (Industrial Products) Ltd
Gelders Hall Road
Shepshed
Loughborough
Leicestershire
LE12 9NH
England

As the manufacturer's authorised representative within the EC
declare that the

SIP PAPR System 1 - SIP Part No. 02814
SIP PAPR System 2 - SIP Part No. 02815

Conforms to the requirements of the following directive(s), as indicated.

(EU) 206/425 Personal Protective Equipment (PPE) Directive

2011/65/EU & (EU) 2015/863 RoHS Directive

And the relevant harmonised standard(s), including:

DIN EN 379:2003+A1:2009

DIN EN 175:1997

Signed: 

Mr P. Ippaso - Managing Director -
SIP (Industrial Products) Ltd
Date: 17/12/2020.



UK - DECLARATION OF CONFORMITY

Declaration of Conformity

We

SIP (Industrial Products) Ltd
Gelders Hall Road
Shepshed
Loughborough
Leicestershire
LE12 9NH
England

As the manufacturer within the UK, England, Scotland & Wales,
declare that the

SIP PAPR System 1 - SIP Part No. 02814
SIP PAPR System 2 - SIP Part No. 02815

Conforms to the requirements of the following directive(s) under UK legislation, as indicated.

The Restriction of the Use of Certain Hazardous Substances in Electrical & Electronic Equipment Regulations 2012

Personal Protective Equipment Regulations (Regulation (EU) 2016/425 as brought into UK law and amended)

And the relevant harmonised standard(s), including:

BS EN 379:2003+A1:2009

BS EN 175:1997

Signed: 

Mr P. Ippaso - Managing Director -
SIP (Industrial Products) Ltd
Date: 01/01/2021.

**UK
CA**



Please dispose of packaging for the product in a responsible manner.

It is suitable for recycling.

Help to protect the environment, take the packaging to the local amenity tip and place into the appropriate recycling bin.



Never dispose of electrical equipment or batteries in with your domestic waste.

If your supplier offers a disposal facility please use it or alternatively use a recognised re-cycling agent.

This will allow the recycling of raw materials and help protect the environment.

**FOR HELP OR ADVICE ON THIS PRODUCT PLEASE CONTACT YOUR
DISTRIBUTOR, OR SIP DIRECTLY ON:**

TEL: 01509 500400

EMAIL: sales@sip-group.com or technical@sip-group.com

www.sip-group.com