aimwell™
SAFER & BETTER

AYO™ WX

Air You Own for Tough Work

AROUND-NECK PAPR SERIES

AYO WX FFM-LF LOOSE-FITTING
FULL-FACE MASK PAPR SYSTEMS

AYO WX FFM-DS DOUBLE-SEAL
FULL-FACE MASK PAPR SYSTEMS

AYO WX HFM STANDARD
HALF-FACE MASK PAPR SYSTEMS

AYO WX HFM-W WELDING
HALF-FACE MASK PAPR SYSTEMS

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A NEW STANDARD IN PROTECTING WORKERS' LUNGS

CONTENTS

Foreword 3
Introduction 3
Safety Warnings & Limitations 3
Know your AYO WX 4
System Overview 4
System Summary Table 5
Mask Assembly 6
Filter Unit 7
Power Unit 7
Donning (Half-Face Mask PAPR System) 11
Donning (Full-Face Mask PAPR System) 12
Doffing (Half-Face Mask PAPR System) 14
Doffing (Full-Face Mask PAPR System) 14
Fit Check & Testing (HFM and FFM-DS) 15
Fit Check (Self-Assessment) 15
Fit Test (Clean-shaven) 15
Working with Beards/Facial Hairs 16
Filter Replacement Instructions 17
Filter Unit Connection 17
Particulate Filter Replacement 18
Combined Filter Replacement 20
Battery Replacement Instructions 21
Inspection and Maintenance 22
Cleaning the Main Unit 23
Cleaning the Mask 23
Quarterly Maintenance 24
Storage 24
Troubleshooting 25
Specifications 26
Replacement/Consumables/Accessories 29
Disclaimer 30
Limited Liability 30
Warranty 30

Foreword

Before using the Aimwell™ AYO™ WX Series Respirators, users must read and understand the User Manual and refer to it for future use. Failure to follow it can harm your health or void the warranty.

Introduction

Congratulations on purchasing the Aimwell™ AYO WX - the advanced around-neck breath-responsive powered air-purifying respirator. It is designed for use in general industrial dusty or toxic environments where a high level of respiratory protection is needed. The AYO WX uses a smart control algorithm to keep positive air pressure in the mask with each breath, ensuring a high level of protection and comfort.

Safety Information

Warnings and Limitations

- **Non-Oxygen Supplying:** The respirator does not supply oxygen. Do not use in low-oxygen environments.
- **Protection level check:** a careful suitability check is needed to ensure the chosen AYO WX is sufficient to reduce the exposure to less than the occupational exposure limit (OEL).
- **Highly Toxic Substances:** Ensure the AYO WX you selected is appropriate for the intended condition and environment, in particular, the toxicity and concentration.
- Do not use in **"Power-off"** mode for loose-fitting AYO WX, as the claimed protection can not be achieved.
- AYO WX PAPRs **are not intended** for use in potentially explosive atmospheres.
- **Do Not Use in IDLH Environments:** Should not be used in Immediately Dangerous to Life or Health situations or environments with unknown contamination levels.
- **Ensure Proper Sealing and Fit of the Facepiece for Tight-fitting applications:** Improper mask size, facial hair can reduce the respirator's protection in tight-fitting applications.
- **Use during high wind velocities:** caution to wear a loose-fitting AYO WX in extreme high wind conditions, as the contaminated air may be blown into the facepiece through facial leaks.
- **TH3 and TM3:** TH3 is the highest protection class per EN 12941, while TM3 is the highest protection class per EN 12942. They have different protection factors; do not mix them up. For example, do not mix up the markings on a filter relating to any standard other than EN 12941 with a classification of an EN 12941 compliant respiratory protection device (RPD) when used with the filter.
- **Gas Filter Classification:** The gas filter classification does not indicate the performance of the device in actual use at the workplace and in relation to established occupational exposure limits.
- **Gas Filter Breakthrough Time:** All AYO WX gas filters are produced to pass the minimum breakthrough times specified in the relevant Standards they comply with. However, the actual service time of these filters depends on the condition of use.
- **Positive Pressure Limitation:** In high-exertion work, the air pressure inside the mask may briefly go negative at the early stage of inhalation, reducing its protection. In this situation, clean-shaven and fit testing are recommended.
- **Not for Escape Use:** The AYO WX Series Respirators are not designed for emergency escape scenarios. It is meant for use in controlled environments.
- **Responding to Warning Signals:** Exit the contaminated area immediately if any alert systems activate (e.g., low battery, filter blockage) or if you feel unwell, have trouble breathing or increased breathing resistance, or if any part of the system becomes damaged, or detect contaminants by smell or taste.
- **No Modification or Improper Use:** Do not replace, modify, open, add to, or remove any parts of the respirator unless specified in the User Manual.

- **Symbols:** for practical reasons, we may use symbols in various parts of our products, such as product labels, packaging, casing, etc. Below shows the symbols we use:

It represents: See information supplied by the RPD manufacturer.

- The information supplied by the manufacturer shall accompany every RPD on delivery, enabling trained and qualified persons to use it.

Safety Guidelines

- **Correct Use:** The user must carefully read this User Manual before first use, and understand and be familiar with its proper use, maintenance, and limitations.
- **Health Considerations:** Individuals with respiratory conditions (e.g., asthma, emphysema) should consult a doctor and undergo a medical evaluation before using the device.
- **Air Supply:** If during use, the air supply stops or is significantly reduced, vacate the contaminated area immediately and investigate the cause of the malfunction before resuming use.
- **Maintenance and Functionality:** Regularly inspect and clean the respirator, charge the battery, and replace the filter per the guidelines in this User Manual. Ensure the device has sufficient charge and flow capacity before each use.
- **Respirator Removal:** Do not remove the respirator until you have left the contaminated area.
- **Storage:** Store the AYO WX in a clean, dry, and cool area when not in use.

Know Your AYO™ WX

System Overview

The AYO WX system comprises two major parts:

1. **Mask Assembly:** Sits on the face and is secured by its head harness.
2. **Main Unit**: Located around the neck, it contains 3 parts.

AYO™ WX MAIN UNIT

Power Unit: houses the electronics, battery, and blower.
Filter Unit: releasably attached to the Power Unit with a bayonet connection.
Guard Link: protects the Main unit when not in use or during clearing. It also facilitates the Flow Capacity Test and makes it easier to hold and carry around.

Below images show the available systems within the series:

AYO™ WX FFM-LF LOOSE-FITTING FULL-FACE MASK PAPR SYSTEMS

AYO™ WX FFM-DS DOUBLE-SEAL FULL-FACE MASK PAPR SYSTEMS

AYO™ WX HFM STANDARD HALF-FACE MASK PAPR SYSTEMS

AYO™ WX HFM-W WELDING HALF-FACE MASK PAPR SYSTEMS

System Summary Table

System	Mask Assembly	Main Unit	
		Power Unit	**Filter Unit**
AYO™ WX HFM P-Boost Dual-Fitting Half-Face Mask PAPR System	Standard HFM Assembly (S/M/L)	Power Unit P-Boost	Particulate
AYO™ WX HFM Gas Tight-Fitting Half-Face Mask PAPR System	Standard HFM Assembly (S/M/L)	Power Unit Gas	Combined
AYO™ WX HFM-W P-Boost Dual-Fitting Welding Half-Face Mask PAPR System	HFM-W Assembly (M/L)	Power Unit P-Boost	Particulate
AYO™ WX HFM-W Gas Tight-Fitting Welding Half-Face Mask PAPR System	HFM-W Assembly (M/L)	Power Unit Gas	Combined
AYO™ WX FFM-LF P-Boost Loose-Fitting Full-Face Mask PAPR System	FFM-LF Assembly (ML)	Power Unit P-Boost	Particulate
AYO™ WX FFM-DS P-Boost Double-Seal Full-Face Mask PAPR System	FFM-DS Assembly (ML)	Power Unit P-Boost	Particulate
AYO™ WX FFM-DS Gas Double-Seal Full-Face Mask PAPR System	FFM-DS Assembly (ML)	Power Unit Gas	Combined

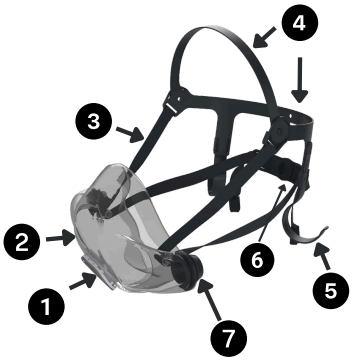
Table 1: AYO WX Series - System Configurations

Refer to the following for more information

- Product Brochures
- AYO WX Shop Page

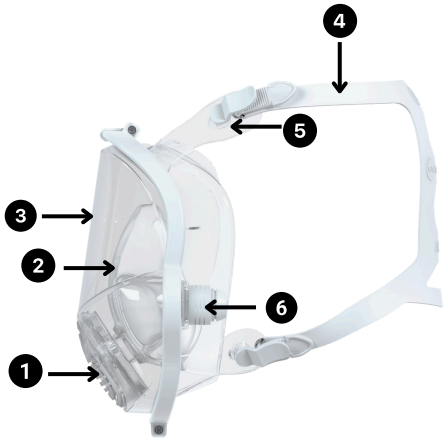
Mask Assembly

Available in different sizes or options.



1. Exhalation Valve
2. Half-Face Mask – (Standard/SP/Welding)
3. Elastic Strap
4. Plastic Headband
5. Main Unit Support Hook
6. Strap Connector
7. Push-Fit Plug

a) Half-Face Mask Assembly



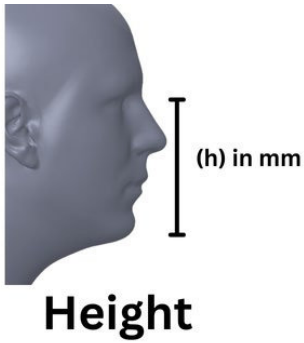
1. Front Module Assembly
2. Inner Mask Assembly (FFM-DS only)
3. Lens & Cushion Assembly
4. Head Strap Assembly
5. Adjustment Toggle
6. Push-Fit Plug

b) Full-Face Mask Assembly

Note: AYO WX FFM-LF does not include the Inner Mask Assembly.

Mask Size Guide

The table below presents the available size options for both half and full-face masks. It matches mask size with the corresponding height range to help you determine the most suitable fit.



HFM		**FFM**	**FFM-DS (Double-Seal)**	**FFM-LF (Loose-Fitting)**
Mask Size	Height	Mask Size	Height	Height
Small	95-105	Medium-Large	110-140	95-140
Medium	105-120			
Large	120-135			

Table 2: Mask Size Selection

***Note**:*

- *The Dual-Fitting AYO WX half-face masks are certified for both loose-fitting and tight-fitting applications.*
- *User protection is compromised when an AYO WX Mask Assembly does not fit the user properly for a tight-fitting application.*
- *Always perform the Fit Test assessment for better fit and protection when using AYO WX masks for tight-fitting applications.*
- *For FFM-DS Assembly, the suitable range is determined by the same height on the face as for the HFM.*
- *If you're between sizes, we recommend choosing the smaller size to minimise leakage.*

Filter Unit

The Filter Unit is detachably connected to the Power Unit.

It contains 2 models:

a) Particulate Filter Unit

b) Gas Filter Unit

Filter Unit – Particulate: contains a pre-filter and a main filter
Filter Unit – Gas: contains a HEPA filter and a gas cartridge to form a combined filter.

Power Unit

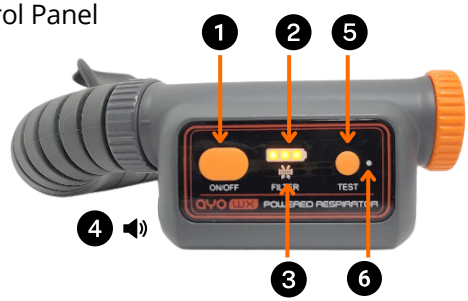
It includes 2 models: P-Boost and Gas, both of which have a similar user interface.

Figure 3: Power Unit

1. Power Unit P-Boost

2. Power Unit Gas

Control Panel



1. ON/OFF button
2. Battery Level Indicator LED(s)
3. Buzzer (installed inside the casing)
4. MODE button
5. MODE LED

Operation Mode: Sleep Mode Standby Mode Run Mode - (Eco, Boost)

1. **Sleep Mode:** The blower is stopped, and the system is placed into a low-power state to reduce battery consumption.

2. **Standby Mode**: The blower is stopped while the system monitors any user inputs or breathing.

3. **Run Mode:** The blower runs; Eco/Boost states are selectable.

Power Unit P-Boost

- **Eco state:** It is designed to maintain positive pressure in the mask with lower power consumption. Ideal for low to moderate intensity work or requiring long operation time.
- **Boost state:** ideal for high-exertion work with heavy breathing, where about twice as much air volume will be generated compared with the Eco state.

Power Unit Gas

- Only runs in Eco state.

Typical Breath-Responsive Operation

- Press ON/OFF button to wake up the system from Sleep Mode to Standby Mode.
- Put on the system around the neck and breathe to trigger the system to Run Mode.
- The system will control the blower responsively for each breath to maintain a positive pressure in the mask.
- When finished using the respirator, simply separate Main Unit and take mask off; the system will stop by itself in a few seconds and enter Standby Mode.
- The system will turn into Sleep Mode if staying in Standby Mode for 10 minutes.

User Interface

1. ON/OFF button:
Functions:
- Wake up from Sleep Mode to Standby Mode.
- Start the blower or clear any alarms in Standby Mode.
- Stop the blower in Run Mode
- Switch to Sleep Mode by pressing for 5 seconds.

2. Battery LEDs:
Three orange LEDs are used to indicate the battery level. In addition, these LEDs also indicate flow capacity during Flow Capacity Test.

Battery Level (%)	Number of LEDs ON
85 to 100	3
20 to 85	2
5 to 20	1
< 5	0

Table 3: Battery Level Versus Number of LEDs On

3. Blocked Filter LED: The Red LED behind the Filter icon will flash to indicate a blocked filter.

4. Buzzer: It beeps when:
- In Standby Mode or Run Mode, when a button is pressed.
- When a low battery or a blocked filter is detected.

5. MODE button:
- In Standby Mode, press once to start Flow Capacity Test.
- In P-Boost Power Unit, toggles between Eco and Boost States.
- Clear any alarms in Standby Mode.

6. MODE LED: The LED has different states based on the Operation Mode. Refer to Table 4.

Operation Mode	LED State
Standby Mode - Normal	OFF
Standby Mode - Flow Capacity Test	ON
Run Mode - Eco	OFF
Run Mode - Boost	Blink (50% duty cycle)

Table 4: MODE LED States

7. Eco/Boost Toggling (Particulate Main Unit Only)

AYO WX Main Unit - Particulate is in Eco state right after wake-up. When the blower is running, Eco or Boost can be toggled at any time by holding the MODE button until a beep is heard.

Warning Facilities

Blocked Filter Alarm - When the filter is blocked, the buzzer will sound, and the red Blocked-Filter LED will flash. The Blocked Filter alarm can be activated in the following scenarios when the filter is blocked.

1. In **Standby Mode**: Press the "On/Off" button once, and the blower will start to run until it stops after no breathing is detected. If the filter is blocked, the buzzer and the Red LED will be activated.

2. In **Run Mode**, during breathing when the filter is blocked, the buzzer and the Red LED will be activated.

3. When taking the mask off before the blower stops, if the filter is blocked, the buzzer and the Red LED will activate.

Low Battery Alarm

The Low Battery audible alarm will be activated when the battery capacity is low in Run Mode.

You should leave the hazardous worksite immediately, and the respirator should be able to run for another 5 minutes for your protection.

Note: All alarms cannot be cleared while the blower is running in Run Mode.

Warning State	Beeps per Second
Low Battery	3
Blocked Filter	2

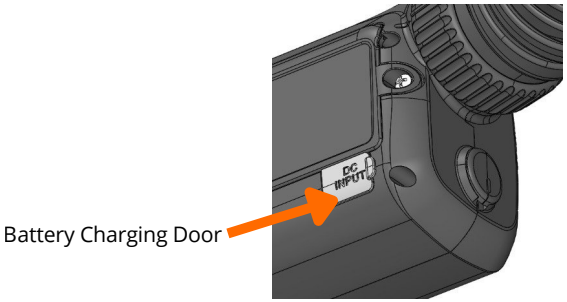
Table 5: Buzzer alarm patterns

Charging The Battery

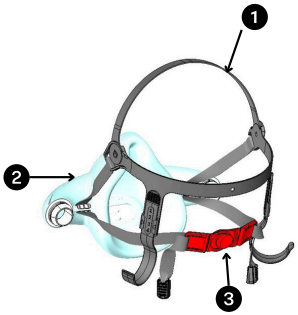
- Locate the charging port at the bottom right corner of the Power Unit Case.
- Open the Charging Port Cover and plug in the AC adaptor plug to charge.
- Close the Charging Port Cover firmly when finished.

Charging indication:

- One light will flash during charging, and the other two lights are either always on or off, depending on the charging status.
- When the battery is charged to about 95% of its capacity, the flashing frequency increases significantly.
- When the battery is fully charged, all three lights are constantly on.
- It takes around 30 minutes to charge from 95% to 100%. Usually, you can consider that the battery is fully charged when the LED flashes quickly.



Donning (Half-Face Mask PAPR System)



Step 1: Ensure harness (1) is fitted correctly to mask (2) without twisted straps, and the buckles (3) are connected.

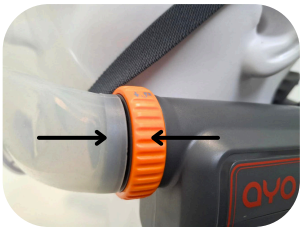
Step 2: Pull strap over head and place on back of neck.

Step 3: Position mask on face and place harness atop head, then tighten strap by pulling on strap ends.

Step 4: Twist Release Ring to remove Guard Link from Main Unit.

Step 5: Press ON/OFF button to wake Main Unit. Make sure at least 2 LEDs are lit, otherwise charge the battery.

Step 6: Hold Main Unit on both sides and slide Main Unit down along the back of head until it sits on support hooks.



Step 7: Push-fit each end of Main Unit to corresponding end of mask until audible click is heard.

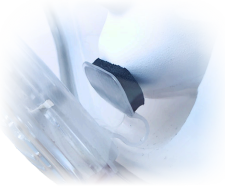
Step 8: Adjust support hook settings if necessary to ensure Main Unit is off and parallel with the shoulder.

Step 9: Place strap buckles over Neck Pad to further secure Main Unit.

Donning (Full-Face Mask PAPR System)

Step 1: Loosen buckles to extend straps and pull harness over head.

FFM-DS

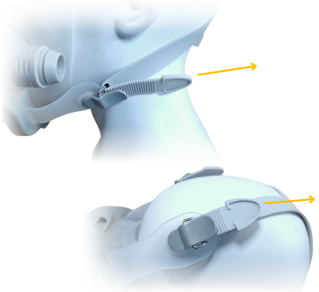


FFM-LF

Step 2: Position mask correctly.

- **For FFM-DS**, seat the inner mask snugly around chin and nose bridge.
- **For FFM-LF**, rest chin on top of chin cushion.

Tip: Avoid hair under face cushion to reduce leaks.



Step 3: Hold mask with one hand, pull on the four strap ends evenly to secure mask in position.

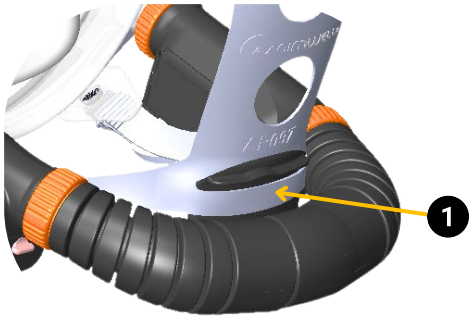
Tip: Bend down to check if there are any loose points and tighten the strap near the loose points if present.

Step 4: Twist Release Ring to remove Guard Link from Main Unit.

Step 5: Press ON/OFF button to wake Main Unit, make sure at least 2 LEDs are lit, otherwise charge the battery.

Step 6: Place Main Unit on back of neck, wedge mask plug slightly outward with a thumb, and push-fit Main Unit socket onto the plug until audible click. Ensure connection is secure and cannot be pulled apart. Repeat connection on other side.

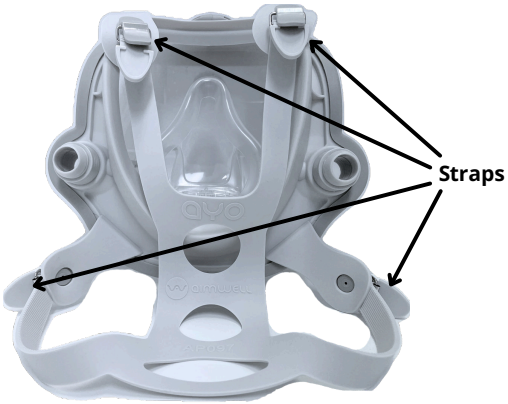
Tip: Align the end of Main Unit with the mask plug axially to ensure a smooth connection.



Step 7: Pull the strap band (1) over Neck Pad to secure Main Unit in position.

Step 8: For optimal comfort and fit, adjust straps to position Main Unit off and parallel with shoulders as follows:

- To lift Main Unit further above shoulders, loosen bottom two straps and tighten top two.
- To lower Main Unit closer to shoulders, loosen top two straps and tighten bottom two.



Doffing (Half-Face Mask PAPR System)

Step 1: Pull strap buckles off Neck Pad.

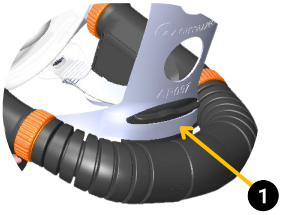
Step 2: Hold Main Unit at one side while twisting Release Ring to disconnect mask plug. Repeat the other side.

Step 3: Along back of head lift Main Unit off support hooks and remove.

Step 4: Take off mask.

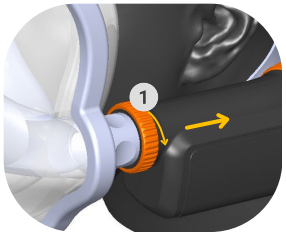
Step 5: Push-fit Guard Link back onto Main Unit.

Doffing (Full-Face Mask PAPR System)



Step 1: Pull the strap band (1) off the Neck Pad.

Step 3: Loosen the bottom straps and take off the mask.



Step 2: Hold Main Unit at one side while twisting Release Ring to disconnect mask plug. Repeat the other side, then take off Main Unit.

Step 4: Push-fit the Guard Ring back to the Main Unit.

Fit Check & Testing (HFM and FFM-DS)

Fit Check (Self-Assessment)

1. Be clean-shaven
2. Don the Mask Assembly.
3. Block the two ends of the Mask with your thumb.

Half Face Mask Assembly

Full Face Mask Assembly

4. Inhale deeply. If the face cushion collapses slightly, the mask is fitted reasonably well. If a leak is felt, firstly adjust the strap tension and/or mask position on the face to see if the leaks are stopped.
5. If leaks remain, try a different mask size and repeat the above until the leak stops.

Fit Test (Clean-shaven):

To achieve the best protection for a tight-fitting application, we recommend conducting a Fit Test for the first time and then every 12 months using specialised Fit Testing equipment, such as the 'PortaCount Respirator Fit Tester 4048.' The Fit Test can be provided by suitable third-party services.

To connect to the external Fit Test system, use the special Fit Test Adaptor available as an accessory, as shown below:

Method:

- Connect the Fit Test Adaptor between the air inlet of the mask and the air outlet of the Main Unit.
- Insert the sampling tube (2) through the mask air inlet to reach the middle of the mask.
- Connect the Fit Test Equipment sampling tube to the sampling port (1).

For more information, visit: AYO WX Quick Guides

Working with Beards/Facial Hairs

Although being clean-shaven is recommended for achieving the highest protection, AYO WX loose-fitting and dual-fitting masks are certified to loose-fitting European Standards EN 12941: 2023 TH3, which can be used for bearded workers or organisations that prefer not to perform regular fit testing for every worker.

AYO WX FFM-LF PAPR is the full-face mask system designed for bearded workers without fit testing, and a FFM Loose-Fitting Kit is provided as an option to cover beards from accumulating dust and reducing leaks.

	Item Number/SKU: AP124	Product Name: AYO™ WX FFM Loose-fitting Face Seal Kit

AYO WX HFM dual fitting PAPRs are the half-face mask systems suitable for bearded workers without fit testing, and a HFM Standard Face Seal is provided as an option to cover beards from accumulating dust and reducing leaks.

	Item Number/SKU: AP131	Product Name: AYO™ WX HFM Standalone Face Seal

These loose-fitting certified models can still provide effective protection for most applications involving light to moderate workloads. Thanks to its breath-responsive flow control technology, the AYO WX can adjust airflow to compensate for beard leaks while maintaining positive pressure in the mask.

For face seal fitting information, visit: AYO WX Quick Guides.

Due to variations in beard thickness and length, it is important to check before use if your beard is too long, which may cause excessive leaks. If you don't feel excessive leaks and the respirator works normally for a few minutes, it is an indication that your beard is acceptable.

Note:

- *Do not use the loose-fitting PAPR if it stops due to excessive leaks. Adjust the mask fit and the head strap tightness, or trim your beard before using it again.*
- *Do not use the loose-fitting PAPR for strenuous work that requires heavy breathing that exceeds the blower capacity.*
- *Beard leaks will consume more battery power, so keep your beard as short as possible and fully charge the battery before use.*
- *Avoid using blocked filters – change filters frequently.*

Filter Replacement Instructions

Filter Unit Connection

Follow the instructions below to attach/detach the filter unit from the power unit.

Position 1:

"PUSH/PULL" on the Filter Unit aligned with the marking on the Power Unit.

Position 2:

The "LOCK" on the Filter Unit aligned with the marking on the Power Unit.

Detach the Filter Unit from the Power Unit:

- From Position 2, hold the Rubber Bellow grip of the Power Unit and twist the Filter Unit anti-clockwise until Position 1 is reached.
- Pull out to detach the Filter Unit.

Attach Filter Unit to Power Unit:

- Hold the Rubber Bellow grip of the Power Unit, then align and push in the Filter Unit as in Position 1.
- Twist the Filter Unit clockwise until Position 2 is reached.

Particulate Filter Replacement

Filter Unit Structure:

1. Filter Door
2. Pre-Filter
3. Pre-Filter Rubber Frame
4. Main Filter
5. Filter Cases

When to Change

- When the Pre-Filter or the Main Filter is visually dirty or oily, or
- When the Filter Blocked alarm is activated, or
- When the Main Filter has been used for more than 6 months.

Note: Filter performance is affected by isopropyl alcohol (IPA). Replace the affected filter immediately.

Changing Pre-Filter:

Step 1: Twist the Knob to unlock (🔓) position.

Step 2: Slide Filter Unit door out.

Step 3: Using end-tab, pull out old pre-filter and insert replacement filter.

Step 4: Slide the door back and twist the knob to lock (🔒) position.

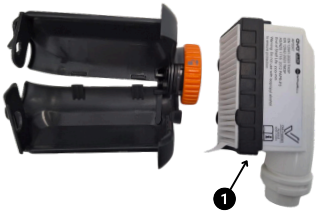
Changing Main Filter:

Step 1: Twist Gas Filter to unlock from Power Unit and remove.

Step 2: Twist the Knob to unlock (🔓) position.

Step 3: Slide Filter Unit door out.

Step 4: While holding the Inner Case and the rubber frame, pull open the outer case.

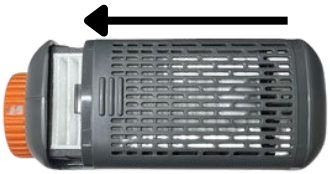


Step 5: Remove filter assembly (1) from casing.

Step 6: Remove the Main Filter from the Pre-Filter Assembly and replace with a new one.

Step 7: Place the filter assembly back in the Inner Case, making sure the Inner Case edge aligns with the groove at the outlet of the Main Filter.

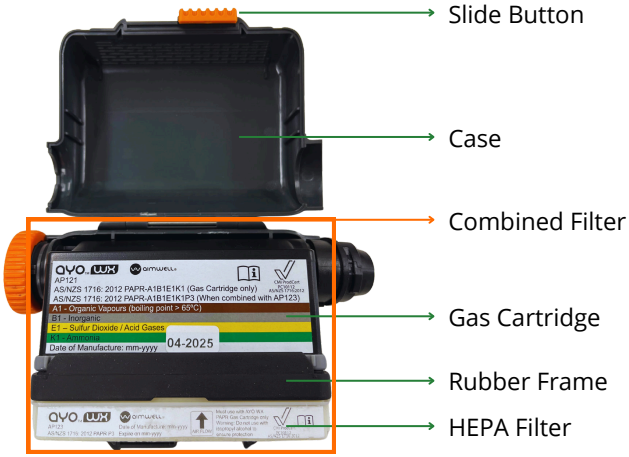
Step 8: Close the Outer Case and press the 2 halve cases together with a 'click'.



Step 9: Slide the filter door back and lock the door.

Step 10: Attach the Filter Unit to the Power Unit.

Combined Filter Replacement



When to Change

- When the HEPA Filter is visually dirty or oily, or
- When you can smell gases, or
- When the Filter Blocked alarm is activated, or
- When either filter has been used for more than 6 months.

Note: Filter performance is affected by isopropyl alcohol (IPA), replace the affected filter immediately.

Changing Steps:

Step 1: Twist Gas Filter to unlock from Power Unit and remove.

Step 2: Slide button to unlock and open up casing halves.

Step 3: Take out the filter assembly.

Step 4: Replace chosen component as below:

HEPA Filter:
Pull HEPA filter (1) out from rubber frame and replace with new filter. Ensure arrow corresponds with air intake direction.

Gas Cartridge:
Lift gas cartridge (2) off rubber frame and replace with new cartridge.

Step 5: Fit the filter assembly back to the casing, close the case, and push the Slide Button to the lock position.

Step 6: Attach the Gas Filter Unit to the Power Unit.

Battery Replacement Instructions:

1. Remove the battery cover screws.

2. Remove the battery cover.

3. Face the battery downward to remove the battery.

4. Fit the new Battery as shown for the correct orientation.

5. Install the Battery Door and tighten the two screws.

6. Insert the AC Adaptor plug to start charging.

Inspection and Maintenance

Daily Visual Check

1. Ensure the Filter Unit is twist-locked to the Power Unit securely.
2. If the filter looks dirty or damaged.
3. Ensure the Filter Unit door is locked.
4. Check the bellows are free of punctures and tears.
5. Check the Main Unit Release Rings (1) can rotate freely.

Main Unit Flow Capacity Test Before Each Use

1. Connect Guard Link to Main Unit correctly and open **Flow Test Plug (1).**
2. In Standby Mode, Press **MODE button** to begin test.
3. LEDs will show flow test result within 3 seconds after blower stops before resuming for battery indication.
   a. Main Unit with clean filters and full battery should achieve 3 lit LEDs.
   b. System fit for use with 2 LEDs, but filter may need changing soon, or battery needs charging.
4. Close Flow Test Plug after test to keep out dirt and debris.

No. of LEDs ON	Flow Capacity	Suitability
3	High	Yes, highly recommended
2	Medium	Yes, recommended
1	Low	Yes, meet the manufacturer's minimum design flow rate
0	Extremely Low	No

⚠ Low-flow capacity may result in a compromised protection level during high exertion.

Cleaning

Daily Cleaning

Cleaning the Main Unit

Wiping:

1. Use a clean damp cloth or disinfectant wipe to wipe casing of Main Unit, especially dust on Release Rings.
2. Twist Release Rings a few times, make sure they are free to return and not getting stuck. Otherwise, a deep cleaning is needed.

Refer to Quick-Connect Socket Cleaning Guide for the deep cleaning details.

Washing The Bellow Section

1. Push-fit Guard Link to Main Unit.
2. Hold on Guard Link and use tap water to flush the bellow section.
3. Wipe dry.

Do not flush-wash the casing. (Water should not cross the yellow line.)

Cleaning Mask

1. Use clean damp cloth or disinfectant wipe to wipe mask inside and outside.
2. If mask is very dirty, flush with tap water, then wipe dry.
3. Leave in clean and open place to dry.

Quarterly Cleaning

1. For FFM-DS, remove the Inner Mask.
2. Soak the entire mask, including the headband, in soapy water or regular detergent for 10 minutes.
3. Rinse with clean water and then wipe dry.
4. Leave it in a clean and open place to dry.
5. For FFM-DS, install the Inner Mask.
6. Finally, apply a thin layer of 100% silicone-based lubricant or petroleum jelly to the plug slots for a smoother connection.

Storage

- When not in use for a long period, store the AYO WX and its filters in the provided bag or a suitable container. Protect them from direct sunlight, dust, extreme temperatures, excessive moisture, and harsh chemicals.
- Charge the battery every 6 months when not in use for extended periods.
- Provided they are stored at room temperature, away from direct sunlight and high humidity, the shelf life from the year of manufacture for unused particulate filters or gas cartridges is a maximum of 5 years. Refer to the label on the filter/cartridge for the expiry date.
- Once opened and even if not used, discard the gas cartridge within 6 months.

FFM-LF and FFM-DS Conversion Instructions

AYO WX FFM-LF loose-fitting full-face mask assembly and AYO WX FFM-DS double-seal full-face mask assembly are interchangeable with each other.

Refer to:
- Quick Guide: CONVERT LOOSE-FITTING (LF) TO DOUBLE-SEAL (DS)
- Quick Guide: CONVERT DOUBLE-SEAL (DS) TO LOOSE-FITTING (LF)

From the webpage: AYO WX Quick Guides for details.

Troubleshooting

Symptom	Possible Causes	Solution
Push-fit plug comes off or loosens even after a hard push	The Release Ring is stuck, or the Push-fit plug slot is dirty.	Refer to the Inspection and Maintenance section for cleaning instructions.
Low flow or during flow capacity check, no or only one battery LED is on.	Foreign objects block the filter unit air inlet.	Remove the blocking objects.
	Pre-Filter blocked.	Replace the Pre-Filter with a new one.
	Main Filter blocked.	Replace the Main Filter with a new one.
	Low battery level.	Charge the battery to ensure 3 Battery Indication LEDs are lit.
The Filter-Blocked LED is lit, and the buzzer beeps.	Foreign objects block the filter unit air inlet.	Remove the blocking objects.
	Pre-Filter blocked.	Replace the Pre-Filter with a new one.
	Main Filter blocked.	Replace the Main Filter with a new one.
Battery LEDs flash when the charger is connected and go off when the charger is removed.	Battery failure.	Replace the battery
Battery LEDs flash at Wake-up for around 10 seconds.	Low battery capacity.	Monitor the condition. If the issue occurs repeatedly, replace the battery.

Specification

Compliance	Respiratory Protection Standards	AYO WX FFM-LF P-Boost Loose-Fitting Full-Face Mask PAPR System	EN 12941:2023 TH3P MS AS/NZS 1716:2012 PAPR-P3
		AYO WX HFM P-Boost Dual-Fitting Standard Half-Face Mask PAPR System AYO WX HFM-W P-Boost Dual-Fitting Welding Half-Face Mask PAPR System	EN 12941:2023 TH3P MS EN 12942: 2023 TM3P MS AS/NZS 1716:2012 PAPR-P3
		AYO WX FFM-DS P-Boost Double-Seal Full-Face Mask PAPR System AYO WX FFM-DS Gas Double-Seal Full-Face Mask PAPR System AYO WX HFM Gas Tight-Fitting Standard Half-Face Mask PAPR System AYO WX HFM-W Gas Tight-Fitting Welding Half-Face Mask PAPR System AYO WX HFM-SP Gas Tight-Fitting Speech-Enhanced Half-Face Mask PAPR System	AS/NZS 1716:2012 PAPR-P3 AS/NZS 1716:2012 PAPR-A1P3 EN 12942: 2023 TM3P MS EN 12942: 2023 TM3A2P MS EN 12942: 2023 TM3A1B1E1K1P MS (coming soon)
	Eye/Face Protection	AYO WX FFM-LF, AYO WX FFM-DS	AS/NZS 1337.1:2010 (Plus Medium Impact and flame impingement Protection) ISO 16321-1-2021 High-speed impact resistance, impact level D
	Respiratory Protection Certification	Australia	CMI ProdCert, Lic: PC10112
		CE Mark	CE 2384 Module B+D In Compliance with EU PPE Regulations 2016/425
		Refer to https://aimwellbreathing.com/aimwell-ayo-wx-certificates/ for the certificate and Declaration of Conformity (DoC)	
	EMC		CISPR 11: 2017+A1:2020
			EN IEC 61326-1:2021
			EN IEC 61326-2-2:2021
			EN IEC 61000-3-2:2019/A1:2021
			EN 61000-3-3:2013/A2:2021
			47 CFR FCC part 15, Subpart B
			ANSI C63.4:2014
	Safety		AS/NZS 61558, EN 61558, UL 62368
Filter Options	Main Filter - Long Life PAPR P3, TM3P, TH3P		Pack of 3, use up to 6 months
	Pre-filter		Pack of 10, replaced when blocked or dirty

Specification

Filter Options	**Gas cartridge A1B1E1K1-EU (coming soon)**	Pack of 1, use up to 6 months
	Gas cartridge A1 (A2-EU)	
	HEPA filter for the Gas cartridge	Pack of 3, Use up to 6 months
Operation Conditions	**Altitude**	Up to 5000m
	Temperature	- 10°C to 50°C (14°F to 122°F)
	Humidity	Up to 95% (non-condensing)
Storage Condition	**Temperature and Humidity**	Short period < 1 month: -5°C to 45°C (23°F to 113°F), 65±20% RH
		Within 3 months -5°C to 35°C (23°F to 95°F), 65±20%RH
		Long period > 3 months 0°C to 35°C (32°F to 95°F), 65±20%RH
Battery Run Time	**Particulate**	Minimum 4 hours, up to 16 hours in Eco State, 8 hours in Boost State
	Gas	Minimum 4 hours, up to 9 hours
Battery Charging	**Within the unit with an external charger provided, 0°C to 35°C**	3.5 hours to 95% (fast flashing LED)
		4 hours full charge (Constant LED)
Battery Life		Typical 3 years, replaceable
Peak Flow	**Particulate**	Up to 205 l/min
	Gas	Up to 130 l/min
Manufacturer Minimum Flow Condition	**Particulate**	115 l/min
	Gas	95 l/min
Alarms	**Filter-Blocked Alarm**	2 beeps per second, flashing Red LED
	Low Battery Alarm	3 beeps per second
Flow Capacity Check	**Peak flow check**	3 levels
Noise Level	**Leq – high exertion**	Up to 71dB
	Leq - typical	< 65dB
Weight	**Power Unit - Particulate**	437g
	Power Unit - Gas	429g
Service life	**Motor/Blower**	10 years
AC Charge Adaptor	**Input**	100 ~ 240VAC, 47~60 Hz
	Output	13.8VDC, 1A
	DC Jack plug	1.1mm pin, 3.0mm barrel

Notes on Marking for CE Certification CE 2834

CE Marking

Contains CE logo and Notified Body number: “2834" represents Notified Body CCQS.

EN 12941:2023 TH3P MS	EN 12941: 2023: The EU loose-fitting PAPR standard published in 2023.
	TH3P: TH is protection class, TH3 being the highest in the class, P is for particulate filtration.
	MS: indicates the product has passed all the mechanical strength tests per EN12941:2023
AYO WX FFM-LF P-Boost	Power Unit: P-Boost.
	Mask: Loose-Fitting Full-Face
	Size: ML
AYO WX HFM P-Boost	Power Unit: P-Boost.
	Mask: Dual-Fitting Half-Face
	Size: S, M, L
AYO WX HFM-W P-Boost	Power Unit: P-Boost.
	Mask: Dual-Fitting Half-Face
	Size: M, L

EN 12942:2023 TM3P MS	EN 12942: 2023: The EU tight-fitting PAPR standard published in 2023.
	TM3P: TM is protection class, TM3 being the highest in the class, P is for particulate filtration.
	MS: indicates the product has passed all the mechanical strength tests per EN12942:2023
AYO WX FFM-DS P-Boost	Power Unit: P-Boost.
	Mask: Tight-Fitting Full-Face
	Size: ML

EN 12942:2023 TM3A2P MS	EN 12942: 2023: The EU tight-fitting PAPR standard published in 2023.
	TM3A2P: TM is protection class, TM3 being the highest in the class, A2 is for organic gas filtration, P is for particulate filtration.
	MS: indicates the product has passed all the mechanical strength tests per EN12942:2023
AYO WX FFM-DS GAS	Power Unit: GAS.
	Mask: Tight-Fitting Full-Face
	Size: ML
AYO WX HFM GAS	Power Unit: GAS.
	Mask: Dual-Fitting Half-Face
	Size: S, M, L
AYO WX HFM-W GAS	Power Unit: GAS.
	Mask: Dual-Fitting Half-Face
	Size: M, L

Replacement/Consumable Items

Item Type	Item Name	Item Code
Mask	AYO WX FFM-LF Loose-Fitting Full-Face Mask Assembly - ML	AP134
	AYO WX FFM-DS Double-Seal Full-Face Mask Assembly - ML	AP096
	AYO WX HFM Standard Half-Face Mask Assembly - Small	AP031
	AYO WX HFM Standard Half-Face Mask Assembly - Medium	AP030
	AYO WX HFM Standard Half-Face Mask Assembly - Large	AP032
	AYO WX HFM-W Welding Half-Face Mask Assembly - Medium	AP093
	AYO WX HFM-W Welding Half-Face Mask Assembly - Large	AP095
	AYO WX HFM Head Strap Assembly	AP038
	AYO WX FFM Head Strap Assembly	AP097
	AYO WX FFM Cushion	AP160
Main Unit	AYO WX Main Unit – P-Boost	AP102
	AYO WX Main Unit – Gas TM3A1	AP104-A1-EU
	AYO WX Main Unit – Gas TM3A1B1E1K1 (coming soon)	AP104-A1B1E1K1-EU
Power Unit	AYO WX Power Unit – P-Boost	AP101
	AYO WX Power Unit – Gas	AP103
Filter	AYO WX Main Filter – Particulate TM3	AP047
	AYO WX Pleated Pre-filter	AP028
	AYO WX Gas Cartridge A1	AP121-A2-EU
	AYO WX Gas Cartridge A1B1E1K1 (coming soon)	AP121-A1B1E1K1-EU
	AYO WX HEPA Filter For Gas TM3	AP123
	AYO WX Filter Unit – Particulate TM3	AP034
	AYO WX Filter Unit – Gas TM3A2	AP120-A2-EU
	AYO WX Filter Unit – Gas TM3A1B1E1K1(coming soon)	AP120-A1B1E1K1-EU
Battery	AYO WX Replaceable Battery Pack	AP037
AC Adaptor	AYO WX AC Adaptor - EU	AP046-EU
	AYO WX AC Adaptor - UK	AP046-UK

Scan the QR code for more information or other accessories.

Disclaimer

You acknowledge and agree that at all times you will use AYO WX in accordance with any user documentation, instruction manuals, guides, and/or requirements we provide to you.

Aimwell makes no representations or warranties and shall not be responsible for the competency of any person who uses AYO WX. If you do not feel well using the AYO WX or have difficulty in breathing, please stop using the AYO WX.

Limited Liability

To the extent permitted by law, you will not hold Aimwell liable for any personal injury, loss of use, loss of profit, interruption of business, or any indirect, special, incidental, punitive, or consequential damages of any kind (including lost profits), regardless of the form of action, whether in contract, tort (including negligence), strict product liability, or otherwise, even if Aimwell has been advised or should have been aware of the possibility of such damages. To the extent permitted by law, Aimwell's liability to you for any claim, whether in contract, tort, or any other theory of liability, does not exceed the purchase price of the system paid by you.

It is further understood that Aimwell shall also have no liability whatsoever concerning damages arising out of or relating to unauthorized access, use, and/or alteration or destruction, by any third party, including any users, of the system or any data contained thereon or created by the system or your computer system.

Warranty

The warranty is valid for 12 months from the date of purchase, during which we offer repair or replacement of faulty products free of charge.

This warranty is provided by:

Aimwell Pty Ltd
Suite 205, 56 Delhi Road
Macquarie Park, 2113
NSW Australia

info@aimwellbreathing.com
(02) 7251 8689

Notified body:

CCQS Certification Services Limited（NB2834）
Block 1 Blanchardstown Corporate Park,
Ballycoolin Road, Blanchardstown, Dublin15, D15
AKK1, Ireland