

AYO™ WX

AROUND-NECK PAPR

AYO WX-STD

AYO WX-SP

AYO WX-WELDING

AYO WX-FFM_LF

AYO WX-FFM_DS



USER MANUAL



CMI ProdCert

PC10112
AS/NZS 1716:2012

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
Power Unit	8
Filter Unit	10
Donning (Half Mask Assembly).....	10
Donning (Full Face Mask Assembly)	12
FFM_DS (Double-Seal):	12
FFM_LF (Loose-fitting):.....	13
Doffing (Half Mask Assembly)	13
Doffing (Full Face Mask Assembly)	14
Fit Check & Testing	14
Fit Check (Self-Assessment):.....	14
Fit Test:	15
Special Use Case	15
Working with Beards	15
Maintenance	16

Daily Checks	16
Cleaning the Main Unit	16
Cleaning the Mask Assembly.....	16
Quarterly Checks	17
Thorough cleaning	17
Flow Capacity Check	17
Storage	18
Assembly/Disassembly Instructions.....	19
Main Unit:	19
Filter Unit – Particulate	20
Power Unit – Particulate Standard/Particulate Boost/Gas:.....	22
FFM_DS Full Face Mask Assembly	23
Troubleshooting.....	25
Specifications.....	26
Replacement/Consumable Items.....	27
Disclaimer	27
Limited Liability	27
Warranty	27

Foreword

Before using the AYO WX Series Respirators, users must read and understand the User Manual. Keep these instructions for future use. Not following these instructions can harm your health and void the warranty.

Introduction

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

Safety Warnings & Limitations



Warnings and Limitations

- **Non-Oxygen Supplying:** The respirator does not supply oxygen. Do not use it in low-oxygen environments, such as confined spaces or areas with oxygen-deficient air.
- **Effective Against Specific Contaminants:** Respirator filters are only effective against specific contaminants like dust, fumes, gases (toxic & non-toxic), and vapors. Always ensure the filters are suitable for the contaminants present.
- **Do Not Use in IDLH Environments:** Should not be used in Immediately Dangerous to Life or Health (IDLH) situations or environments with unknown contamination levels.
- **Proper Sealing and Fit:** Ensure the facepiece is sealed correctly. Facial hair, glasses, or other obstructions can reduce the respirator's protection.
- **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 any part of the system becomes damaged, or detect contaminants by smell or taste.
- **No Modification or Improper Use:** Do not replace, modify, add, or remove any parts of the respirator unless mentioned in the **Maintenance** section.



Safety Guidelines

- **Adequate Training:** Only trained personnel should use the AYO WX Series PAPR. Users must 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 Interruption:** 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, charge, and replace batteries and filters per guidelines in the **Maintenance** section. Ensure the device is powered on and functioning properly before entering contaminated areas.
- **Removing Respirator Prematurely:** Do not remove the respirator until you have left the contaminated area.
- **Maintenance and Storage:** Store the AYO WX Series in a clean, dry area when not in use. Follow all maintenance procedures, including regular filter and battery replacements, to ensure the respirator remains functional.

Know your AYO WX

System Overview

The AYO WX has two major parts that, when combined, form the system

1. **Mask Assembly(s):** The part that sits on the face and is secured by its head harness.
2. **Main Unit(s):** The part that blows clean air to the mask located around the neck. It has 3 parts.



Power Unit(s): It houses the electronics and facilitates the airflow.

Filter Unit(s): It attaches to the Power Unit and filters the air.

Guard Link: It protects the Main unit when not in use or during clearing. It facilitates Flow Capacity Testing.



AYO WX-STD Half Mask System(s)



AYO WX-SP Half Mask System(s)



AYO WX-Welding Half Mask System(s)



AYO WX-FFM_DS Full Face Mask Double-Seal System(s)



AYO WX-FFM_LF Full Face Mask Loose-fitting System

System Summary Table

System	Mask Assembly	Main Unit	
		Power Unit	Filter Unit
AYO WX-STD Particulate Standard System	WX STD HMA (S/M/L)	Power Unit – Particulate Standard	Particulate
AYO WX-STD Particulate Boost System	WX STD HMA (S/M/L)	Power Unit – Particulate Boost	Particulate
AYO WX-STD GAS System	WX STD HMA (S/M/L)	Power Unit – Gas	Gas
AYO WX-SP Particulate Standard System	WX SP HMA (S/M/L)	Power Unit – Particulate Standard	
AYO WX-SP Particulate Boost System	WX SP HMA (S/M/L)	Power Unit – Particulate Boost	
AYO WX-SP – GAS System	WX SP HMA (S/M/L)	Power Unit – Gas	
AYO WX-Welding Particulate Standard System	Welding HMA (M/L)	Power Unit – Particulate Standard	Particulate
AYO WX-Welding Particulate Boost System	Welding HMA (M/L)	Power Unit – Particulate Boost	Particulate
AYO WX-Welding GAS System	Welding HMA (M/L)	Power Unit – Gas	Gas
AYO WX-FFM_LF Particulate Standard System	FFM (ML)	Power Unit – Particulate Standard	Particulate

System	Mask Assembly	Main Unit	
		Power Unit	Filter Unit
AYO WX-FFM_LF Particulate Boost System	FFM (ML)	Power Unit – Particulate Boost	Particulate
AYO WX-FFM_LF GAS System	FFM (ML)	Power Unit – Gas	Gas
AYO WX-FFM_DS Particulate Standard System	FFM (ML)	Power Unit – Particulate Standard	Particulate
AYO WX-FFM_DS Particulate Boost System	FFM (ML)	Power Unit – Particulate Boost	Particulate
AYO WX-FFM_DS GAS System	FFM (ML)	Power Unit – Gas	Gas

Table 1: AYO WX Series - System Configurations



- Refer to Product Brochures for more information or visit our website www.aimwellbreathing.com.

Mask Assembly

Mask Assemblies are available in different size options.



a) Half Mask Assembly

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



b) Full Face Mask Assembly

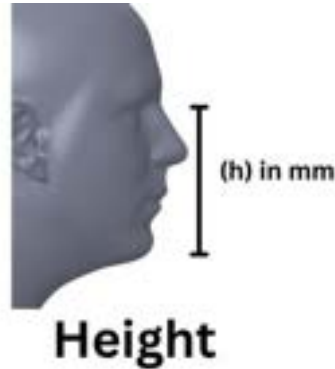
1. Front Module Assembly
2. Inner Mask Assembly (FFM_DS)
3. Lens & Cushion Assembly
4. Head Strap Assembly
5. Fit Adjust Toggles
6. Push-Fit Plug



- WX FFM_LF does not include the Inner Mask Assembly.

Mask Size Guide

This table outlines the size options for half and full-face masks, providing height and width measurements to help you select the appropriate fit. Please refer to the dimensions to ensure the mask provides optimal coverage and protection based on your face size.



Half Mask		FFM_DS (Double Seal)		FFM_LF (Loose Fitting)
MASK SIZE	HEIGHT	MASK SIZE	HEIGHT	One size fits all.
Small	95-105	Medium-Large	110-140	
Medium	105-120			
Large	120-135			



- User protection is compromised when the Mask Assembly does not fit the user properly.
- Always perform the Fit Test assessment for better fit and protection.
- For WX FFM_LF Loose-fitting full-face mask, most faces should be suitable except extremely large or small faces, as long as no excessive leaks
- For WX FFM_DS, the size range is determined by the distance from the top of the nose bridge to the point of the chin



- For complete information and video tutorials on Mask Size Options, visit our website www.aimwellbreathing.com.

Power Unit

There are 3 models which are designed for different use cases. All the variants have the same interface and differ in performance. Detailed information can be found in the **Operation Mode** section.



Figure 3: Power Unit



1. Power Unit – Particulate Standard



2. Power Unit – Particulate Boost



3. Power Unit - Gas

User Interface



All Power Units have 3 LED Indicators, 2 buttons and 1 buzzer.

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

1. **Power Button (ON/OFF button):** This button performs multiple actions based on the device Mode.
 - a. Sleep/Wake System: When the respirator is in **Sleep Mode**, press once to switch to **Standby Mode**.
 - b. Start/Stop Motor: When in **Standby Mode**, press once to start the Motor.
 - c. Mute Buzzer: When the buzzer is active, pressing the button once will Mute the buzzer.
2. **Battery Level Indicator:** These orange LEDs indicate the battery level of a respirator. In addition, these LEDs will indicate the flow capacity while in **Flow Capacity Check Mode**.
3. **Blocked Filter Indicator:** The red LED will turn on if a filter block is detected.

Battery Level (%)	Number of LEDs ON
85 to 100	3
20 to 84	2
5 to 19	1
< 5	0

Table 2: Battery Level & LED State

4. **Buzzer:** Every functional button press will trigger the buzzer briefly. It will also beep when the respirator detects a low battery or a blocked filter.



The Buzzer's sound pressure level is up to 80 dB at the right ear.

5. **TEST/MODE Button:** When in **Standby Mode**, press once to start **Flow Capacity Check** (*Guard Link* must be connected) to perform the System Health Check. (Refer **Maintenance** section for instructions)
In Particulate Boost Power Unit, when the system is in **Run Mode**, press and hold for 2 seconds to switch into **Boost Mode** and vice-versa.

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

Buzzer State	Beeps per Second
Low Battery	3
Blocked Filter	2

Table 3: Buzzer Function


Operation Mode	LED State
Eco	OFF
Boost	Blink ( 50% duty cycle)
Flow Capacity Check	ON

Table 4: TEST/MODE LED States

Operation Mode

The system can be in one of the modes at any given time,

1. Standby Mode 2. Sleep Mode 3. Run Mode 4. Boost Mode

- Standby Mode:** In this mode the system is actively monitoring for user inputs or breathing action.
 - Test and Blocked Filter LED's will be OFF and Battery Level Indicator will be ON.
 - When breath detected or **ON/OFF** button is pressed, the system will switch to **Run Mode** (by default).
 - If the system detects 10 minutes of inactivity, it will switch to **Sleep Mode**.
- Sleep Mode:** The system is placed into a low power state, to reduce battery consumption. By pressing the **ON/OFF** button, the system will switch to **Standby Mode**.
- Run Mode:** The system maintains positive pressure in the mask with low power consumption. Ideal for long operation time and protection. If no breathing is detected, the system will switch to **Standby Mode**.
- Boost Mode** (only in Particulate Boost Power Unit): This mode is an option for high-exertion work with heavy breathing. The system maintains higher positive pressure and blows more air responsively to heavy breathing.

Alerts:



- Blocked Filter Alert:** The system will activate the BUZZER and LED when a blocked filter condition is detected, refer to Tables 3 & 4.

It is a critical state, **Warnings and Limitations** instructions must be followed.



- Low Battery Alert:** The system will activate the BUZZER when a low battery is detected.

It is a critical state, **Warnings and Limitations** instructions must be followed.

Flow Capacity Check

This is a built-in test to check if the system can achieve the flow capacity as expected. If the check fails a **Blocked Filter Alert** is triggered. More information can be found in the “**Maintenance**” section.

Filter Unit

There are 2 variants: Particulate and Gas. The Particulate Filter Unit contains a pre-filter and a main filter, while the Gas Filter Unit contains a HEPA filter and a gas cartridge.



To learn more about filter options for AYO WX Series Respirators, visit our website at www.aimwellbreathing.com.

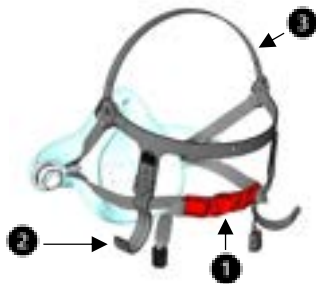


a) Particulate Filter Unit

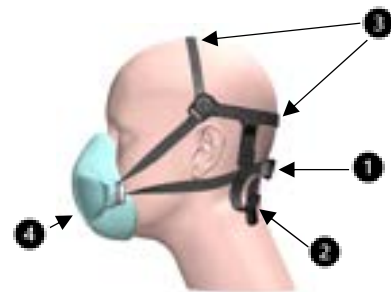


b) Gas Filter Unit

Donning (Half Mask Assembly)



1. Connect strap connectors (1) (a hook and a loop) to each other. Insert the support hooks (2) into slots on the head strap (3) (The left hook and the right hook are identical).



2. Place the Strap Connector (1) with Elastic Straps (2) on the back of your neck and put the Silicone Mask (4) on your face. Then Slide the Plastic Headbands (3) to the top and back of the head. Adjust the Mask fit by pulling the straps through the strap connector (1).



If the mask is not fitted properly, the protection level could be compromised



3. Remove Guard Link from Main Unit

4. Press the “ON/OFF” Button to switch the system to Standby Mode, ensure minimum 2 battery LEDs are ON. Otherwise, charge the unit.

5. Use two hands to hold the two sides of the Main Unit.

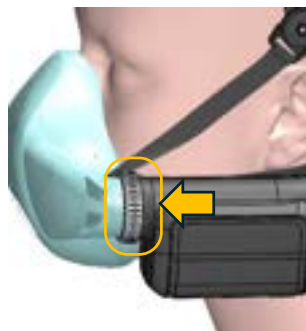
6. Slide the Main Unit down against the back of the head until the Rubber Bellows (5) come to rest in the Hooks (4).



9. Adjust the positions of the Main Unit by moving the adjustable hooks (6) to a suitable slot on the Plastic Strap (7) to ensure the Main Unit is off and parallel to the shoulder for best mobility.



7. Push each end of the main unit to the corresponding plug of the mask until you hear a click sound, ensuring the connection is secure and cannot be pulled apart.



8. Repeat the previous step for the other side.

10. Place the strap Connectors (8) on the neck pad (9) of Main Unit to better support Main Unit



Donning (Full Face Mask Assembly)

FFM_DS (Double-Seal):



1. When putting on the FFM_DS for the first time, fully loosen all headgear toggles. Place your head into the FFM Assembly through the lower opening of the head straps, if necessary, pull hair back out of the mask area.
2. Position the tip of your chin over the far end of the chin cup, ensuring that the front of your chin fully contacts the inner mask cushion. Then, push the FFM evenly against your face, ensuring the inner mask cushion contacts and presses against your nose bridge.
3. While holding the FFM, fasten the straps evenly by pulling on the straps one at a time for a secure fit.



To ensure the straps are tightened sufficiently, bend over and check if the full-face cushion or the inner mask cushion feels loose. If they do, tighten the straps slightly and test the fit again. Continue adjusting the straps until the mask fits snugly and securely on your face, while maintaining the position as centered on the face.

4. While holding the Mask Assembly, push the Main Unit to the push-fit plug until a click sound is heard.



Adjust the angle of the Main Unit to align with the push-fit plug while holding the mask assembly.



Make sure the connection is secured by pulling on the Main Unit.



5. Pull the strap band out while pulling the neck pad on the power unit into the opening, and ensure the band is latched on the neck pad.



Adjust the four straps to ensure the main unit sits parallel to and clear from the shoulder. To raise the main unit, tighten the top two straps and loosen the bottom two. To lower the main unit, loosen the top two straps and tighten the bottom two.

FFM_LF (Loose-fitting):

Fitting the Loose-fitting Full-Face Mask (FFM_LF) is similar to FFM_DS, except:



1. Position the tip of your chin against the Chin Brace.
(a. Chin Brace supports your chin securely)

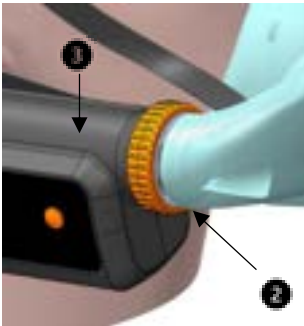


2. Pull down the fabric-pulling tab to cover your beard fully.

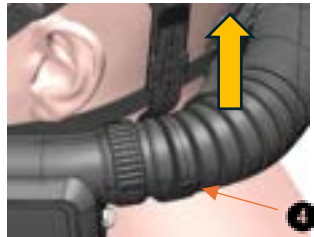


3. Place the elastic strap on top of your head.

Doffing (Half Mask Assembly)



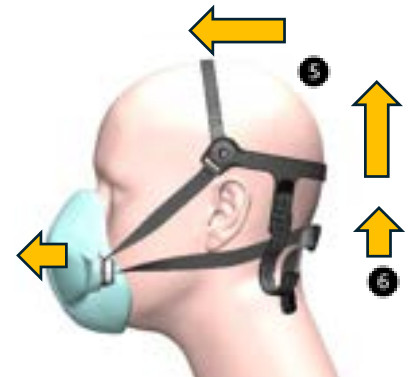
1. Disconnect the Main Unit from the Mask Assembly by twisting the grip ring of the Twist-release socket (2) while holding the Filter Unit / Power Unit (3).



2. Slide the Main Unit upwards against the neck to make sure it is separated from the Hooks (4) then take it off the head.



3. Fit the Guard Link back to the Main Unit.



4. Pull Plastic Straps (5) off from the top and the back of the head.
5. Take Strap Connectors (6) off from the neck.



Keep Hooks adjustment for the convenience of future use.

Doffing (Full Face Mask Assembly)



1. Disconnect the Main Unit from the FFM assembly by twisting the grip ring of the Twist release socket **(1)**



2. Lift the Main Unit up along the back of the head and take off the Main Unit.



3. Loosen the bottom mask toggle **(2)** and remove the FFM assembly from the head.



Keep Hooks adjustment for the convenience of future use.

Fit Check & Testing

Fit Check (Self-Assessment):

1. Don the Mask Assembly (do not attach the Main Unit).
2. Using your Thumb (👉), block the two ends of the Mask Assembly's Push-Fit Mask Plug opening's.



Half Face Mask Assembly



Full Face Mask Assembly

- Inhale deeply. If the face cushion collapses slightly, the FFM has a proper fit. If a leak flow is felt, adjust strap tension and/or mask position on the face to eliminate leaks. Try a different mask size and repeat the check until the fit is satisfactory.

Fit Test:

To ensure the mask fits properly, we recommend conducting a Fit Test for the first time and then every 12 months using specialized Fit Testing equipment, such as the 'PortaCount Respirator Fit Tester 4048.' This Fit Test can be provided by suitable third-party services, which are widely available. To connect to the external Fit Test system, use the Fit Test Adaptor (available as an accessory) for the best results.

Special Use Case

Working with Beards



Although being clean-shaven is recommended for achieving the highest protection that requires tight fitting of the respirator, AYO WX provides loose-fitting options for bearded workers and organizations that don't plan to perform fit testing for every worker.

AYO WX-FFM_LF is the full-face mask system designed for bearded workers without fit testing. In addition, all AYO WX half-face masks can be fitted with the HFM Loose-fitting Face Seal as an add-on accessory and used for bearded workers without fit testing too.

These loose-fitting options can still provide effective protection for most users with **normal beards under light to moderate workloads**. Thanks to its breath-responsive flow control technology, the AYO WX can adjust airflow to compensate for beard leaks, maintaining positive pressure in the mask.

Due to variations in beard thickness and length, it is important to check if your beard is not too long which may cause excessive leaks before use. 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 PAPR if it stops due to excessive leaks. Trim your beard before using it again.
- Do not use the PAPR for strenuous work that requires heavy breathing.
- 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.

Maintenance

Daily Checks

Visual Inspection: Visually check the following before each use:

- Bayonet connection between Filter Unit and Power Unit.
- If Filter Door is correctly locked.
- If the bellows are damaged or torn.
- If the Grip Ring is free to return.

Daily Cleaning: It is recommended to clean AYO WX after each use. Clean Mask Assembly and Main Unit separately.



After detaching Mask Assembly from Main Unit always attach the Guard Link to Main Unit.

Cleaning the Main Unit

Dry Cleaning: Use either a damp cloth or tissue to wipe the plastic parts of the Main Unit, including the casing and the Grip Ring of the Twist-Release Socket.

Twist-Release Grip Ring:

1. Twist the grip ring in the direction of the arrow (↻). Upon release, it should return to its original position smoothly (↻), without catching or getting stuck. If the action is not smooth, repeat a few times.
2. Clean the grooves after every use to prevent dust and grime buildup.



- Over time, the buildup of dust and grime may affect its normal function.
- Check and clean after every use.

Tap Water Cleaning the Bellow Section: Cleaning with Tap water is allowed provided following these steps:

1. Connect the Guard Link to the Main Unit firmly and ensure the flow plug is fully closed.
2. Hold the Guard Link and use tap water to flush wash the bellow section of the Main Unit only.



Dry the Main Unit with a lint-free cloth.



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



Cleaning the Mask Assembly

Full Face Mask Assembly & Half Mask Assembly

1. For daily cleaning, use tap water to flush inside and outside of the Mask.
2. Use a damp cloth and thoroughly wipe the inside of the mask as much as possible.
3. Drain and wipe off water from each part of the Mask. Air dry or use a clean and dry cloth to rub dry each part of the Mask. Leave the Mask in an open space to dry further.
4. **Push-Fit Plug:** Apply a thin layer of 100% silicone-based lubricant or Vaseline to the grooves (marked in green) of the plug for smoother connection.



Quarterly Checks

Thorough cleaning

Half Mask Assembly and FFM LF Loose-fitting Assembly

- Soak silicone Mask and Head Strap in soapy water or a suitable detergent such as mild dishwashing liquid or laundry liquid for 10 minutes.
- Then repeat the daily cleaning procedure.

FFM_DS Full Face Mask Double-seal Assembly

- Disassembly the mask assembly by using the steps provided in the **Assembly/Disassembly Instructions**.
- Soak the Lens/Cushion Assembly, Inner Mask Assembly and Head Strap in soapy water (such as mild dishwashing liquid or laundry liquid) for 10 minutes.
- Then repeat the daily cleaning procedure.

Flow Capacity Check

Check flow capacity quarterly by following the below instructions.

1. Push-fit the Guard Link (1) to the respirator. You should hear a 'click' sound.
2. Open the plug (2) on the Guard Link.
3. In **Standby Mode**, press the TEST/MODE Button to run the flow test.
4. Check the number of lit Battery Indication LEDs after the LEDs just stop shifting. After displaying the flow capacity for 3 seconds, the LEDs will resume the normal battery LED indication
5. Upon finishing the flow capacity test, close the plug.



No. of LEDs ON	Flow Capacity	Suitability
3	High	Yes, highly recommended
2	Medium	Yes, recommended



Low-flow capacity may result in a compromised protection level.

1	Low	Yes, meet the manufacturer's minimum design flow rate
0	Extremely Low	No

Storage

When not in use for a long period, store the AYO WX in the provided bag or a suitable container. Protect it from direct sunlight, dust, extreme temperatures, excessive moisture, and harsh chemicals.

- Charge the battery every 3 months when not in use for extended periods.
- The shelf life of unused particulate filters is a maximum of 5 years from the year of manufacture, provided they are stored at room temperature and 50% relative humidity.
- The shelf life of an unopened Gas cartridge is normally up to 3 years from the year of manufacture. Refer to the label on the cartridge for the expiry date.

Assembly/Disassembly Instructions

Main Unit:

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



Position 1:
Filter Unit's "PUSH/PULL" aligned with Power Unit's "Indicator Line".



Position 2:
Filter Unit's "LOCK" aligned with Power Unit's "Indicator Line".

Detach Filter Unit from Power Unit: From **Position 2**, firmly hold the rubber bellow grip of the **Power Unit** and twist the **Filter Unit** in anti-clockwise direction until **Position 1** is reached. Pull out to detach the Filter Unit.



Attach Filter Unit to Power Unit: Align and push in the **Filter Unit** as in **Position 1**, firmly hold the Rubber Bellow grip of the **Power Unit**, and rotate the **Filter Unit** in a clockwise direction until **Position 2** is reached.



Filter Unit – Particulate

There are 5 main components, the Filter Case, Filter Door, Main Filter, Pre-Filter and Silicone Holder.



1. Filter Door
2. Pre-Filter
3. Pre-Filter Rubber Holder
4. Main Filter
5. Filter Case

Replacing Pre-Filter:

1. Detach the Filter Unit from Power Unit (refer to “**Main Unit Assembly**” section).



2. Twist the Knob to unlock (🔓) position



3. Push the grips to slide the Door out.



4. While holding down the rubber place holder, pull out the Pre-Filter using the tab.

5. Replace it with a new Pre-Filter and slide the Filter Door back. Make sure the Knob is twisted back to lock (🔒) position.

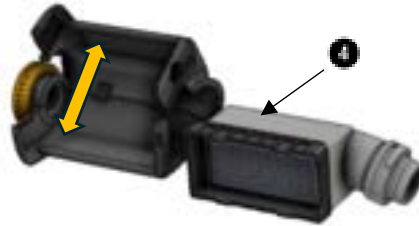
6. Attach the Filter Unit to Power Unit (refer to “**Main Unit Assembly**” section).

Replacing Main Filter:

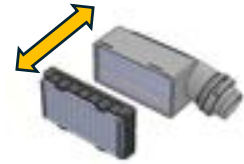
1. Detach the Filter Unit from Power Unit (refer to “**Main Unit Assembly**” section).
2. Detach the Filter Door (refer to steps 2 & 3 from “**Replacing Pre-Filter**” section).



3. While holding the Filter Case firmly, push on the outer case (3).



4. Remove the Pre-Filter & Main Filter (4) from the Filter Case.



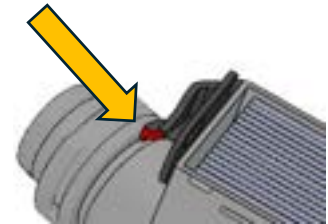
5. Separate the Pre-Filter Assembly and dispose the Main Filter.



6. Attach Pre-Filter Assembly to the New Main Filter.



7. Place the combined filters in the Filter Case.



- Make sure the case edge aligns with the Filter.



8. Align the mating Tabs on Outer Case to the Catches on the Inner case, then rotate to close.

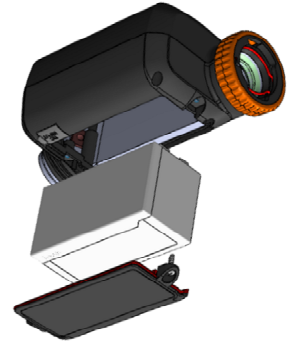
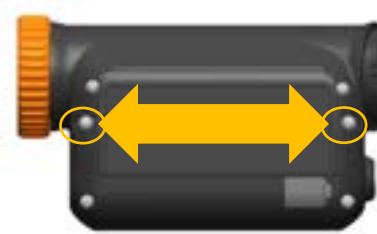


9. Press the 2 half cases to each other until it locks into position. When locked, you will hear 'click' sound.

10. Slide the filter door back on and lock the door as shown in **“Replacing Pre-Filter”** section.

11. Attach the Filter Unit to Power Unit (refer to **“Main Unit Assembly”** section).

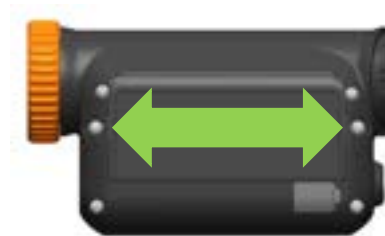
Power Unit – Particulate Standard/Particulate Boost/Gas:
Replacing Battery:



1. Using a S1.5 Allen key to remove the battery cover screws.
2. Remove the Battery Cover
3. Remove the battery. Flip the case upside down to allow the battery to slide out of the case.



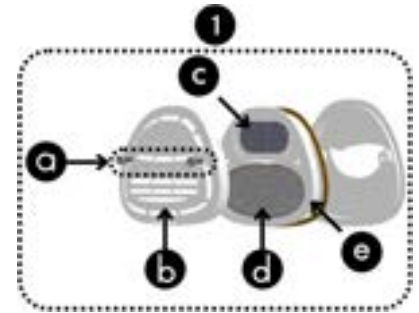
4. Locate the Battery as shown for the correct orientation.



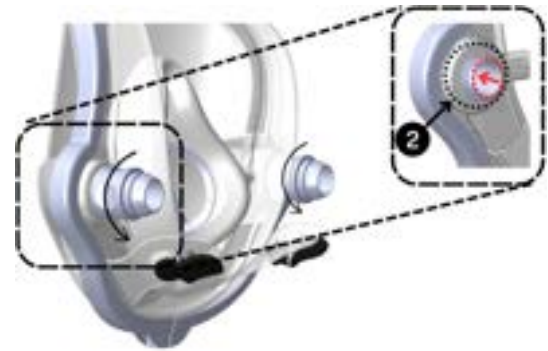
5. Install the Battery Door and tighten the two screws.

FFM_DS Full Face Mask Assembly

1. Front Module Assembly
 - a. Screws
 - b. Front Module Cover
 - c. Exhalation Membrane
 - d. Speech Diaphragm
 - e. Common Membrane Seat
2. Lens/Cushion Assembly
3. Inner Mask Assembly Push-Fit Plugs
4. Silicone Head Strap



Disassembly Instructions:



1. Take off the Front Module Cover (1b) by undoing the two screws (1a) using an Allen Key. The Cover will drop out by its weight when tilted. Remove the Common Membrane Seat using the pull tab.
2. Unscrew the push-fit adaptor. Once detached, push the threaded connector in through the hole (2). Repeat on the other side.

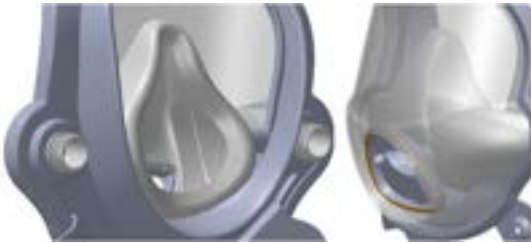


While handling the Common Membrane Seat, be careful not to damage the Exhalation Membrane & the Speech Diaphragm.

3. Remove the Inner Mask Assembly. When removed from the Lens/Cushion Assembly, the inner mask should look like the image on the right.



Assembly Instructions:



1. Fit the Inner Mask Assembly into the Lens/Cushion Assembly and push each thread connector through the hole on each side. Roughly align the Front Module Base of the Inner Mask Assembly to the Lens/Cushion Assembly's opening.



3. Insert the Common Membrane Seat.



Be careful not to clip or bend the silicone seal.
Be careful not to damage the Exhalation Membrane & Speech Diaphragm.



2. Screw the push-fit adaptor onto the inner mask threaded connector.



Do not overtighten. Apply only finger-tight pressure.



4. Attach the Front Module Cover and screw on the two screws.



Do not overtighten. Apply only finger-tight pressure.

Troubleshooting

Symptom	Possible Causes	Solution
Push-fit plug comes off or loose even after a hard push	The Grip Ring is stuck, or the Push-fit plug slot is dirty.	Rotate the ring a few times. Clean the slot on the Push-fit Plug, then smear a thin layer of Silicone-based lubricant.
Low flow or during flow capacity check, no or only one battery LEDs 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 then become normal.	Low battery capacity.	Replace the battery

Specifications

Compliance



Respiratory Protection

- AS/NZS 1716:2012 PAPR-P3

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

CMI

- AS/NZS 1716:2012 Lic: PC10112

Operation Conditions

Altitude

-1000m to 1000m

Temperature

-10°C to 45°C (14°F to 113°F)

Humidity

Up to 95% (non-condensing)

Battery Run Time

Particulate

Typically, 8 - 16 hours depending on the actual workload and dust concentration.

Peak Flow

Particulate

Over 200 l/min

Gas

Over 170 l/min

Manufacturer Minimum Flow Condition

120 l/min

Weight (Power Unit)

Under 550g (particulate filter)

AC Charge Adaptor

Input

100 ~ 240VAC, 47~60 Hz

Output

13.8VDC, 1A

DC Jack plug

1.1mm pin, 3.0mm barrel

Battery Charging Conditions

Charge Temperature

0°C - 35°C

Charge Time

- 3.5 hours = 95% charge
- 4.0 hours = 100% charge

Replacement/Consumable Items



Refer to <https://aimwellbreathing.com/shop-industrial-respirator/> for information.

Scan the QR code to shop for replacements.

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.

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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.

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