REGISTER
YOUR WARRANTY

Photos illustrating products are non contractual.

# SANUVAIR® M8

## MODULAR UV AIR PURIFICATION SYSTEM

## Commercial or Residential Model

## ⚠ IMPORTANT SAFETY INSTRUCTIONS ⚠

**READ AND SAVE THESE SAFETY INSTRUCTIONS BEFORE USING THIS PRODUCT.**

**Read and follow all instructions contained in the manual before using the product. Read the maintenance instructions before opening the UV unit or system. Failure to comply with these instructions may result in injuries or damage to the UV unit or system.**

**⚠ NEVER EXPOSE EYES OR SKIN TO AN OPERATING UV LAMP. ⚠**

1. **Installation and servicing** of UV units or systems (in an air conditioning system or not) **can be hazardous**. **Only trained and qualified service personnel** should install, repair or service equipment.

1.1. Do not run cord under carpeting. Do not cover cord with throw rugs, runners, or similar.

1.2. Do not operate product with a damaged cord or plug. Discard product or return to an authorized dealer.

2. **Untrained personnel** can perform **basic maintenance** functions such as replacing lamp(s) and/or filter(s). All other operations should be performed by trained service personnel.

3. The unit is not to be used by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge.
   ⚠ **CAUTION:** Unit is not a toy. Keep away from unsupervised children. Do not leave children unattended with the unit.

4. **DO NOT hang onto the UV unit or system**.

5. Some UV units or systems could be heavy: Make sure you have a minimum of 2 people to safely move or install these UV units or systems, and make sure you adopt the most ergonomic position possible (use UV unit or system handles, if applicable).
   ⚠ **CAUTION:** Installing or maintaining heavy equipment, especially overhead, can cause back pain or other injuries.

6. When installing or servicing an overhead UV unit or system, be careful not to fall off the stepladder. Furthermore, make sure the UV unit or system latches are always in place to prevent falling parts.
   ⚠ **CAUTION:** Some parts of some UV units and systems may open suddenly if the UV unit or system is installed high up without its locks.

7. Units that are obviously damaged must not be operated.

8. ⚠ **CAUTION: When working on the UV unit or system, observe precautions on the literature, tags and labels attached to the UV unit or system, and all other safety precautions considered as best practices in the HVAC industry, if applicable.**

9. When applicable, local regulation may comprise more restrictive installation and/or certification requirements. The aforementioned requirements prevail on those of this document and the installer agree to conform to these at his own expense.

10. Follow all the safety instructions outlined in this document and respect all local and national codes applicable.

11. All UV units or systems contain a UVC source. Damage to the housing or unintended use of the UV unit or system may result in harmful UVC leaks. UVC may, even in little doses, cause harm to the eyes and skin.

12. **Never expose eyes or skin to an operating UV lamp.** Therefore, **before installing or performing maintenance** on the UV unit or system, **TURN OFF AND DISCONNECT** the UV unit or system **from all power sources** (there may be more than one switch to disconnect) and also disconnect the HVAC system, is applicable.
    ⚠ **CAUTION:** Electrical shock may cause injuries or possibly death. FIRST AID INSTRUCTIONS: If injured, consult a doctor.

13. UV rays may damage certain types of filters (polymer or plastic); please keep the UV unit or system light away from shining directly on plastic.

14. When installing or performing maintenance on the UV unit or system, it is recommended to **wear safety gloves**. In order to avoid reduced performance of lamp(s), **do not touch lamp glass without gloves**.

15. Just like conventional fluorescent lamps, UV lamps contain a small quantity of mercury: if a lamp breaks, clean and **dispose of with care**. UV lamps can be disposed/recycled after use in the same way as any other fluorescent lamps. Contact and follow the specific instructions of your local and national authorities.

15.1. Dispose of unit or system according to the specific instructions and standards of your local and national authorities.

16. **Use only specified SANUVOX branded replacement UV lamps for your UV unit or system.** Use of any other lamps will void your warranty and can result in damage to the UV unit or system.

17. Sanuvox UV units or systems are not waterproof. **DO NOT INSTALL OUTDOORS OR IN WET LOCATION** unless specified otherwise.

18. Use of this unit or system supplements, but does not replace, infection control best practices. Users must follow all these practices, particularly with regard to cleaning and disinfecting surfaces.

**SAVE THESE INSTRUCTIONS**

**For any inquiries on a UV unit or system, contact:**
**Robert Smith**
**146 Barr St, Saint-Laurent**
**Quebec, CA, H4T 1Y4**
**1-888-726-8869**
**techsupport@sanuvox.com**

**Installation Date:** _____ **Installed by:** _____

**Installer Contact Info.:** _____

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Intertek

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## ABOUT THE PRODUCT

The **Sanuvair® M8** is a modular UV air purifier that can be configured for a range of purposes.

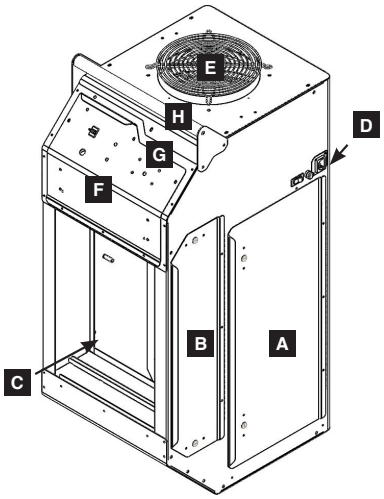
**For information or recommendations on how to size your specific application, please call SANUVOX at 1-888-726-8869.**

## COMPONENTS

### The Core

At its **core**, air enters the unit through the inlet filters at the front, tinside the UV chamber and is expelled purified at the outlet. The unit is powered via a standard C13 power cord into a 115V outlet. An ON/OFF button beside the power receptacle enables turning the unit on. Two internal limit switches prevent the unit from starting if the innermost filter is not correctly installed and the lamp hatch is not properly closed. On the front of the unit a fan speed selector enables to switch between LO – MED – HI.

By default, the **Sanuvair® M8 core** includes a primary MERV-9 prefilter (**FTR-19**) and a primary UV 16" 'J' lamp (**LMPHGJ160**, purple end caps), with the provision for an additional filter and lamp.

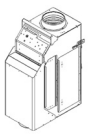



A. Lamp Access Door
B. Filter Bay Access Door
C. Filter Bay
D. C14 Power Inlet, Fuse and ON/OFF Button
E. Motor
F. Electronics Bay Access Door
G. Speed Selector Switch
H. Handle

**Sanuvair® M8** = **Core** + Your choice of **Kit** + Your choice of **Subkit**

### The Kits

The modular design of the **Sanuvair® M8** allows this air purifier to be installed in several different ways using the following '**Kits**' (sold separately).

| KITS | KIT COMPONENTS |
|---|---|
| Stand alone or wall-mounted (**ASTD**)<br>See page 5 for step by step installation | • Additional Handle<br>• Grill<br>• Wall Brackets |
| Mobile (**AMBL**)<br>See page 7 for step by step installation | • Cart<br>• Grill<br>• Deflector |
| Ducted (**ADCT**)<br>See page 9 for step by step installation  | • Duct Adaptor<br>• 8" Collar (**MSC-COL-1**)<br>• Wall Brackets |

## The Subkits

The modular design of the **Sanuvair® M8** allows this air purifier to be customized to better address a variety of different issues using the following '**Subkits**' (sold separately).

| SUBKITS | SUBKIT COMPONENTS |
|---|---|
| Germicidal (**FGCD**)<br>See page 15 for step by step setup | • UV Lamp (**LMPHGJ160**, purple end caps)<br>• HEPA Filter (**FTR-21**) |
| Odor Reduction (**FODO**)<br>See page 15 for step by step setup | • UV Lamp (**LMPHGXJ160**, yellow end caps)<br>• Lightweight Carbon Filter (**FTR-20**) |
| Odor Control for Garbage Rooms (**FOZD**)<br>See page 16 for step by step setup | • UV Lamp (**LMPHXJ160**, blue end caps)<br>• Dense Carbon Prefilter, MERV 9 (**FTR-22**)<br>• Lamp Control Module*<br>• Ozone (OZD) Detector |
| Odor Control for Smoke Rooms (**FVOC**)<br>See page 21 for step by step setup | • UV Lamp (**LMPHXJ160**, blue end caps)<br>• Dense Carbon Prefilter, MERV 9 (**FTR-22**)<br>• Lamp Control Module*<br>• Volatile Organic Compound (VOC) Detector |

**Odor Control subkits** are designed to help continuously reduce unpleasant odors emanating from putrefaction (**FOZD**) and smoke (**FVOC**), through a photo-oxydation process.

**Sanuvair® M8** equipped with subkit...
Odor Control for Garbage Rooms (**FOZD**): The OZD detector automatically turns the second lamp OFF when not required.
Odor Control for Smoke Rooms (**FVOC**): The VOC detector automatically turns the second lamp ON when required (when triggered by smoke).

* The **Lamp Control Module** enables the control module to turn off or on the unit's secondary UV lamp. The necessary wiring is added with the selected option: simply place the detector where desired and plug its 3 wires to the **Sanuvair® M8**.

## INSTALLATION & SETUP

### What you will need
Utility knife, scissors, a flat screwdriver, and a Phillips screwdriver.

Unpack and assemble the configuration modules to the unit, as per each module's instructions.

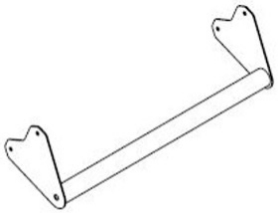
⚠ **CAUTION:** Handle your product with care to avoid breaking parts. Make sure you have a free and safe space to unpack, install and setup your product. Confirm you have access to the necessary power source for the product requirements (see unit or system label). If you have any questions regarding the installation instructions, call SANUVOX at 1-888-726-8869.

### What's included
The Sanuvair® M8 core and a basic installation kit.
The installation kit includes the installation instructions, a handle and a pair of cotton gloves.

⚠ **CAUTION:** Heavy unit. Lift using two people or with appropriate supervision.

### Step by Step 'Kit' Installation I Stand alone or wall-mounted (ASTD)

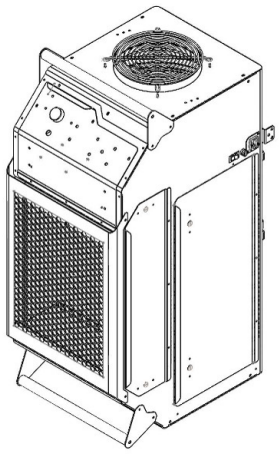
When the Sanuvair® M8 is installed as a stand-alone or wall-mounted purifier, begin the installation by addin the second handle at the bottom.



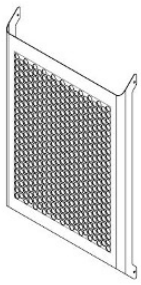
**STEP 2**

1. Carefully remove the **handle** and its **screws** from their packaging.
2. Fasten the two handle plates to the FRONT bottom using the provided 8-32 screws.

**It is recommended to place the unit in a location within the natural air flow of the room. To move the unit, simply lift it by its handles and carry it to the intended position.**



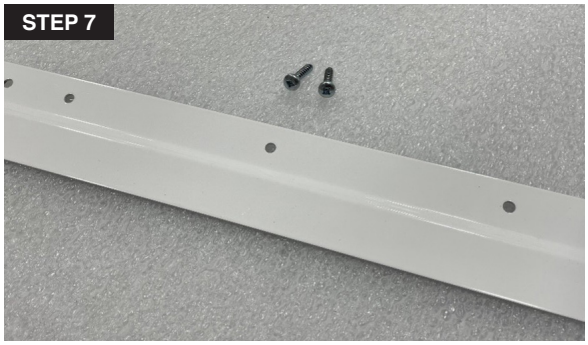
**STEP 3**



3. Carefully remove the **grill** from their packaging.

**STEP 4**

4. Temporarily remove the indicated screws on both sides.
5. Align the protective grill module with the FRONT mounting holes.
6. Fasten the protective grill to the unit using the screws from step 4.

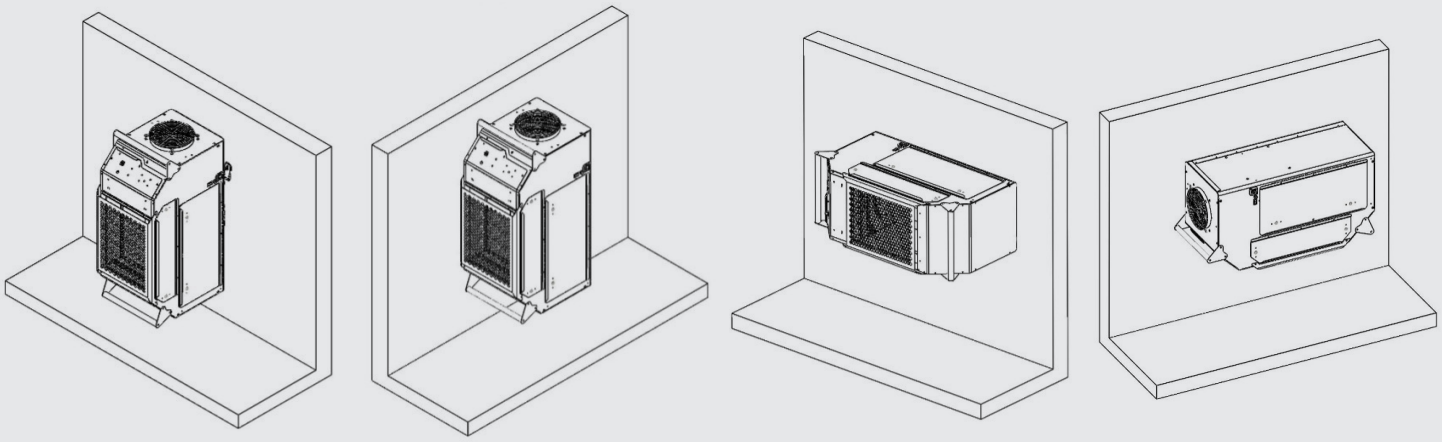



**NOTE:** If your selected SUBKIT is for **Odor Control for Garbage Rooms (FOZD)** or **Odor Control for Smoke Rooms (FVOC)**, it is recommended to begin with the **Lamp Control Module installation** at page 17 or page 22 prior to installing the M8 to the wall.

7. Install the M8 to the wall with the use of **wall brackets**. Refer to the following diagrams:

## Wall Brackets

The M8 can be installed upright or sideways and either on its back face or side face using two pairs of mounting brackets. It is recommended to select a position with ease of access to the maintenance doors. Both pairs of brackets should be used for a more even weight distribution.



**A** Upright mount on rear face

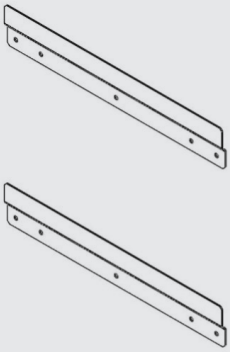
**B** Upright mount on side face

**C** Sideways mount on rear face

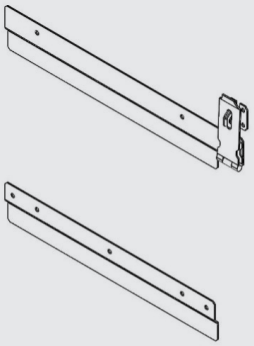
**D** Sideways mount on side face

For enhanced safety, one of the brackets allows the use of a padlock to retain the M8 to the wall. It is recommended to favor the installation of the M8 in a way that enables the use of a padlock.

**NOTE:** Some positions (C, D) do not allow the use of the padlocked hinge and require removal of the padlock by drilling off the 4 retaining rivets from the mounting bracket.

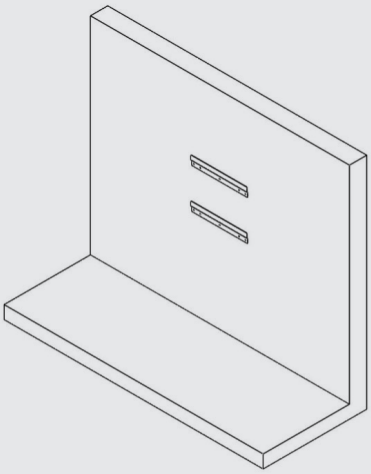


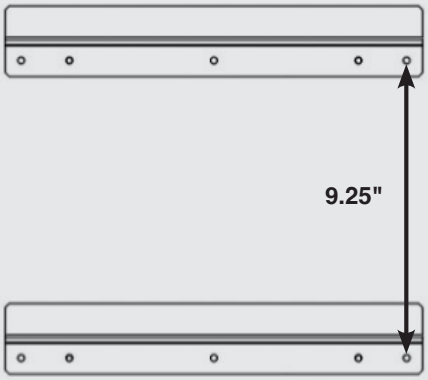
Brackets mounted on wall



Brackets mounted on M8

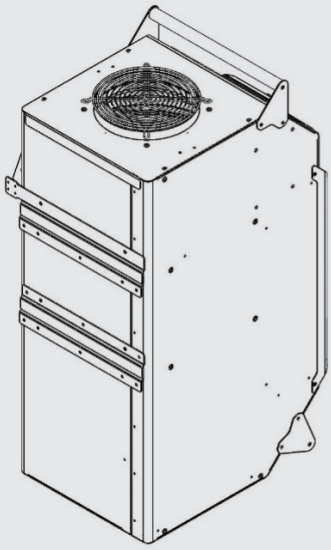
The **brackets mounted on the wall** must always be installed upwards as shown using an appropriate anchoring method (not included). Ensure the correct center-to-center distance between the brackets.

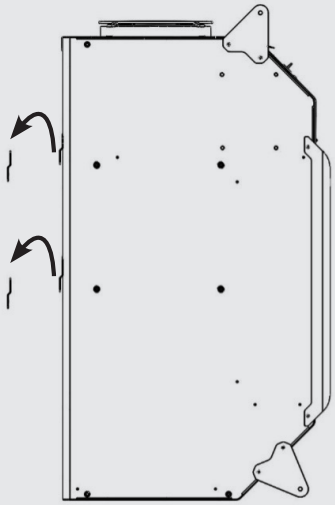




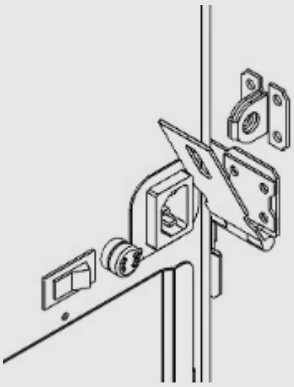

The **brackets mounted on the M8** are installed by fastening into the chosen mounting points with the provided 10-32 screws so that the brackets point downwards. The padlock bracket can be on the top or bottom position.

When ready, lift and hang the M8 onto the wall brackets.





Fasten the receiving bracket for the padlock using the provided screws.

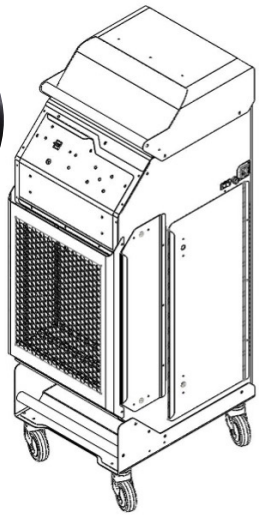


## You are now ready to set up your "Subkit" option.

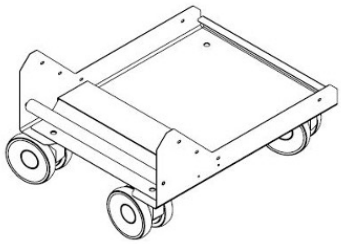
Germicidal (**FGCD**) & Odor Reduction (**FODO**): See page 15 for step by step setup
Odor Control for Garbage Rooms (**FOZD**): See page 16 for step by step setup
Odor Control for Smoke Rooms (**FVOC**): See page 21 for step by step setup

## Step by Step 'Kit' Installation I Mobile (AMBL)

The mobile unit can travel on its caster wheels, ready to be placed where needed. Unlock the wheel brakes and push the unit with its handlebar. When not in motion, it is recommended to set the brakes.



**STEP 1**



1. Carefully remove the **cart** from their packaging.

**STEP 2**

2. Tilt the unit on its back and align the cart module with the LOWER mounting holes.

**STEP 3**

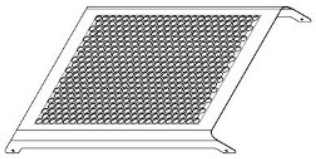
3. Temporarily remove the indicated screws on both sides

**STEP 4**

**STEP 5**

4. Fasten the cart to the unit using the screws from the previous step.
5. Place the unit back upright.

**STEP 6**

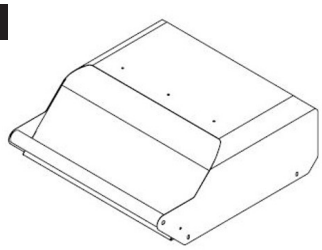


6. Carefully remove the **grill** from their packaging.

**STEP 7**

7. Temporarily remove the indicated screws on both sides.
8. Align the protective grill module with the FRONT mounting holes.
9. Fasten the protective grill to the unit using the screws from step 7.

**STEP 10**

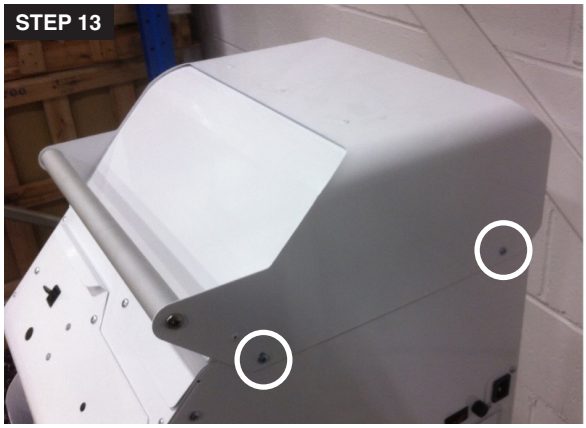


10. Carefully remove the **deflector** from their packaging.

**STEP 11**

11. Remove handle (set aside as it is no longer needed) and temporarily remove the indicated screws on both sides.

**STEP 13**



12. Align the deflector module with the UPPER mounting holes.

13. Fasten the deflector to the unit using the screws from step 11.

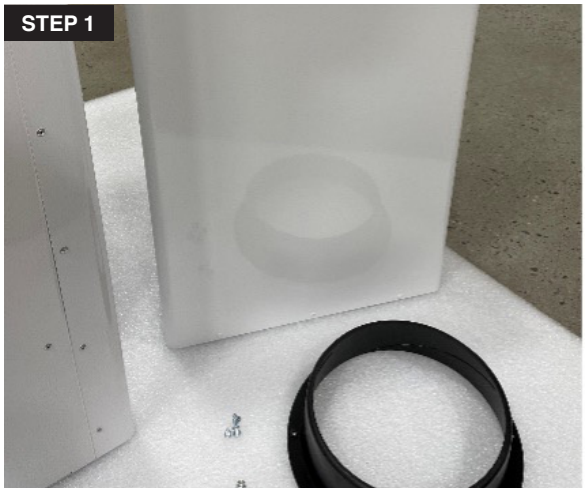
## You are now ready to set up your "Subkit" option.

Germicidal (**FGCD**) & Odor Reduction (**FODO**): See page 15 for step by step setup
Odor Control for Garbage Rooms (**FOZD**): See page 16 for step by step setup
Odor Control for Smoke Rooms (**FVOC**): See page 21 for step by step setup

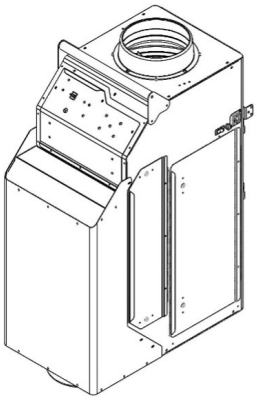
## Step by Step 'Kit' Installation I Ducted (ADCT)

Determine where the unit will be installed. Fasten the adaptor collars to the inlet and outlet of the unit.

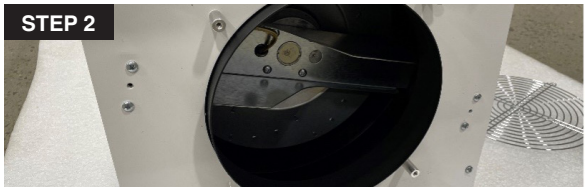
STEP 1



1. Carefully remove the **duct adaptor**, the **8" collars (2)** and the **collar mountings screws (8)** from their packaging.



STEP 2



2. Unfasten the outlet grill and its supports from the top of the unit.

STEP 3

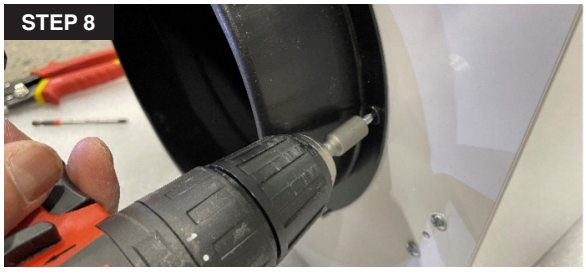
3. Install the round 8" collar on the duct adaptor module using 4 screws.

STEP 4

4. Temporarily remove the indicated screws on both sides.
5. Align the duct adaptor module with the FRONT mounting holes.
6. Fasten the duct adaptor to the unit using the screws from step 4.

   **NOTE:** To reduce pressure losses it is recommended to seal the duct adaptor to the unit.

STEP 8



7. Adjust the outlet collar to clear any obstacles.
8. Fasten the outlet collar to the top of the unit using the 4 provided screws.

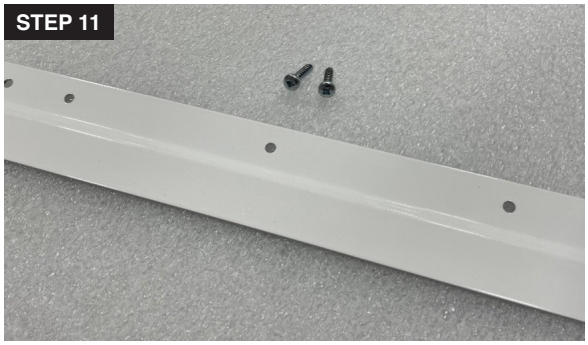
9. Place the unit at its desired location.

   **NOTE:** For ease of maintenance, orient the unit for direct access to the filter and lamp hatches.

10. To connect the **Sanuvair® M8** to the ductwork, use 8" diameter **flexible tubing** (not included).

    Install the outlet hose on the fan outlet using a duct clamp.

    Install the inlet hose on the duct adaptor using a duct clamp.

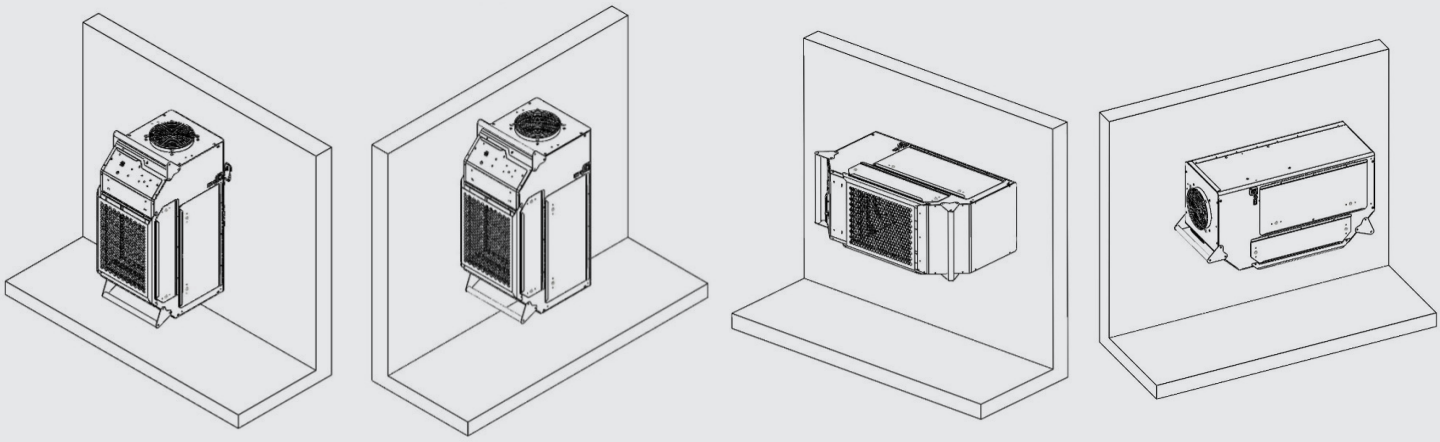



**NOTE:** If your selected SUBKIT is for **Odor Control for Garbage Rooms (FOZD)** or **Odor Control for Smoke Rooms (FVOC)**, it is recommended to begin with the **Lamp Control Module installation** at page 17 or page 22 prior to installing the M8 to the wall.

11. Install the M8 to the wall with the use of **wall brackets**. Refer to the following diagrams:

## Wall Brackets

The M8 can be installed upright or sideways and either on its back face or side face using two pairs of mounting brackets. It is recommended to select a position with ease of access to the maintenance doors. Both pairs of brackets should be used for a more even weight distribution.



**A** Upright mount on rear face

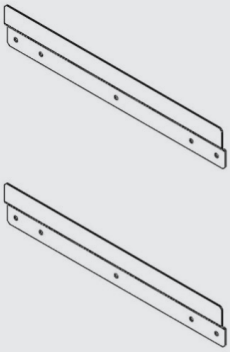
**B** Upright mount on side face

**C** Sideways mount on rear face

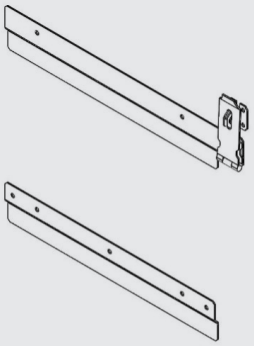
**D** Sideways mount on side face

For enhanced safety, one of the brackets allows the use of a padlock to retain the M8 to the wall. It is recommended to favor the installation of the M8 in a way that enables the use of a padlock.

**NOTE:** Some positions (C, D) do not allow the use of the padlocked hinge and require removal of the padlock by drilling off the 4 retaining rivets from the mounting bracket.

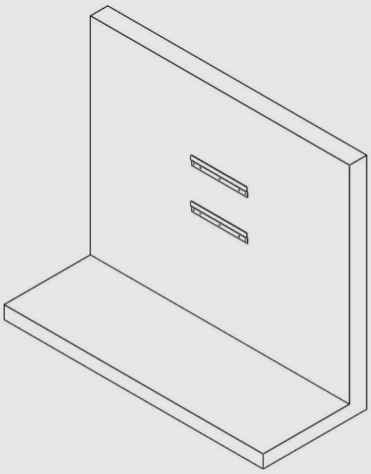


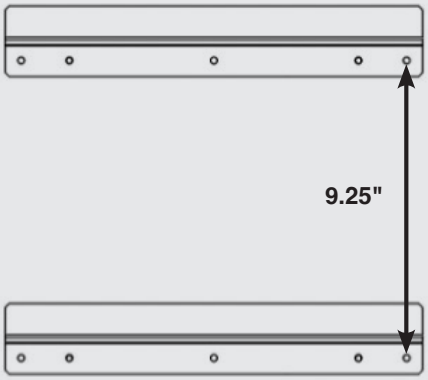
Brackets mounted on wall



Brackets mounted on M8

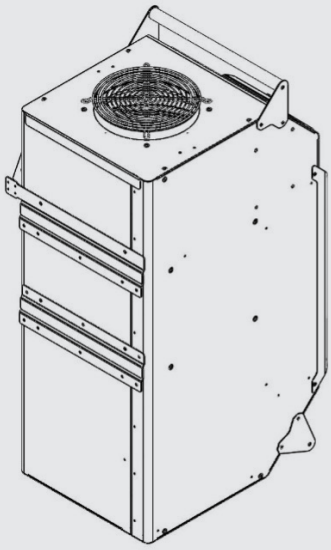
The **brackets mounted on the wall** must always be installed upwards as shown using an appropriate anchoring method (not included). Ensure the correct center-to-center distance between the brackets.

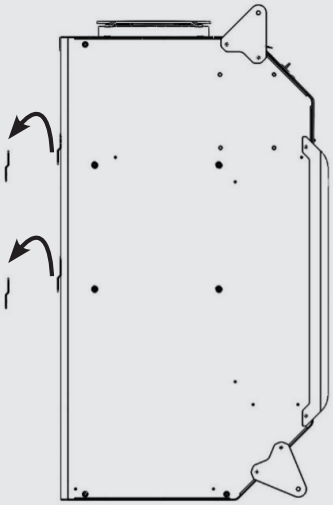




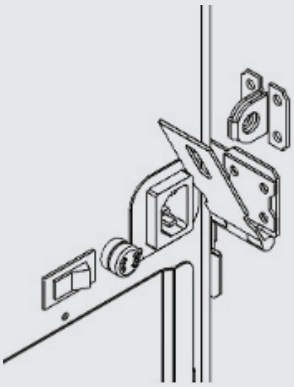

The **brackets mounted on the M8** are installed by fastening into the chosen mounting points with the provided 10-32 screws so that the brackets point downwards. The padlock bracket can be on the top or bottom position.

When ready, lift and hang the M8 onto the wall brackets.





Fasten the receiving bracket for the padlock using the provided screws.



## You are now ready to set up your "Subkit" option.

Germicidal (**FGCD**) & Odor Reduction (**FODO**): See page 15 for step by step setup
Odor Control for Garbage Rooms (**FOZD**): See page 16 for step by step setup
Odor Control for Smoke Rooms (**FVOC**): See page 21 for step by step setup

## Step by Step 'Subkit' Setup I Germicidal (FGCD) & Odor Reduction (FODO)

With these "subkits", you will need to setup: the primary MERV-9 prefilter (**FTR-19**), the primary UV 16" 'J' lamp (**LMPHGJ160**, purple end caps), a secondary lamp and a secondary filter.

1. **Using a screwdriver, unfasten the filter hatch locks and open.**

2. **Remove the plastic packaging from the prefilter and filter** and place them inside the filter bay, with the primary prefilter outwards and the secondary filter inwards.

   **NOTE:** Place prefilter and filter with the arrows pointing towards the interior of the unit.

3. **Close the filter hatch and secure it closed.**

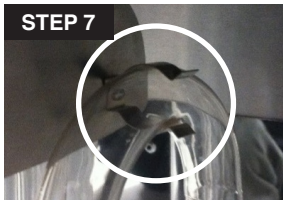
4. Using a screwdriver, unfasten the lamp hatch locks and open it.

5. **Remove the lamps from their packaging.** Be sure to wear the cotton gloves (included) ensuring the lamps are free from fingerprints.

   **NOTE:** Fingerprints on the lamps will negatively impact their UV output.

6. Carefully plug the lamps to the lamp connectors inside.
   **Ensure that the primary and secondary lamps are plugged into their respective connectors #1 and #2, indicated on the support bracket.** Primary lamp (**LMPHGJ160**, purple end caps) should be plugged in connector #1. Secondary lamp (purple or yellow end caps, according to 'subkit' option), should be plugged in connector #2.

   **NOTE:** The plugs are designed so that lamps can only be installed one way. You may have to rotate the sockets $90^0$ to line up the pins with the holes. The connectors will fit into position.



7. Clip each lamps to thier two supports as shown.

8. **Close the lamp hatch and secure it closed.**

**You are now ready use your Sanuvair® M8!**

## Step by Step 'Subkit' Setup | Odor Control for Garbage Rooms (FOZD)

With this "subkit", you will need to setup: the primary MERV-9 prefilter (**FTR-19**), the primary UV 16" 'J' lamp (**LMPHGJ160**, purple end caps), the secondary lamp UV (**LMPHXJ160**, blue end caps), the secondary MERV-9 prefilter (**FTR-22**), a lamp control module and a OZD detector.

STEP 1

1. **Using a screwdriver, unfasten the filter hatch locks and open.**

STEP 2

2. **Remove the plastic packaging from the prefilters** and place them inside the filter bay, with the primary prefilter outwards and the secondary prefilter inwards.

   **NOTE:** Place prefilters with the arrows pointing towards the interior of the unit.

STEP 4

3. **Close the filter hatch and secure it closed.**

4. Using a screwdriver, unfasten the lamp hatch locks and open it.

STEP 5

5. **Remove the lamps from their packaging.** Be sure to wear the cotton gloves (included) ensuring the lamps are free from fingerprints.

   **NOTE:** Fingerprints on the lamps will negatively impact their UV output.

STEP 6

6. Carefully plug the lamps to the lamp connectors inside.
   **Ensure that the primary and secondary lamps are plugged into their respective connectors #1 and #2, indicated on the support bracket.** Primary lamp (**LMPHGJ160**, purple end caps) should be plugged in connector #1. Secondary lamp (**LMPHXJ160**, blue end caps), should be plugged in connector #2.

   **NOTE:** The plugs are designed so that lamps can only be installed one way. You may have to rotate the sockets 90$^0$ to line up the pins with the holes. The connectors will fit into position.

STEP 7

7. Clip each lamps to thier two supports as shown.

8. **Close the lamp hatch and secure it closed.**

9. Install the **Lamp Control Module**. Refer to the following diagrams:

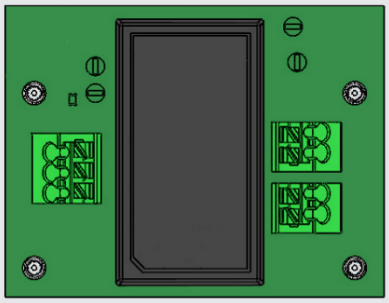
## Lamp Control Module

**What you will need**
No.2 Phillips screwdriver, 2mm flat screwdriver, long-nose pliers.

**What's included**
This package includes: lamp control board, mounting screws (4), threaded standoffs (4), detector cord bushing (1), transparent plug and retaining ring (1), 6" black wire (1), 6" white wire (1).

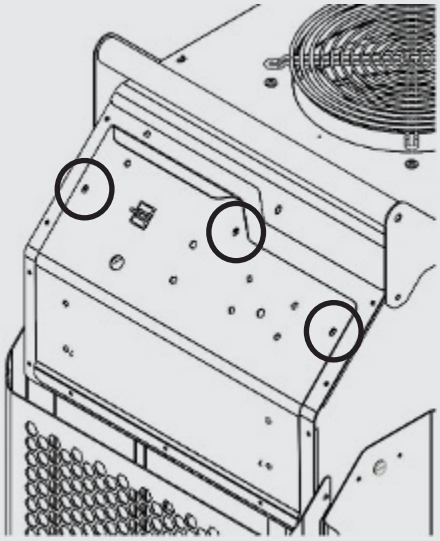
⚠ **CAUTION:** Make sure that the M8 is turned off and unplugged prior to commencing the installation.

Carefully remove the contents from their packaging.

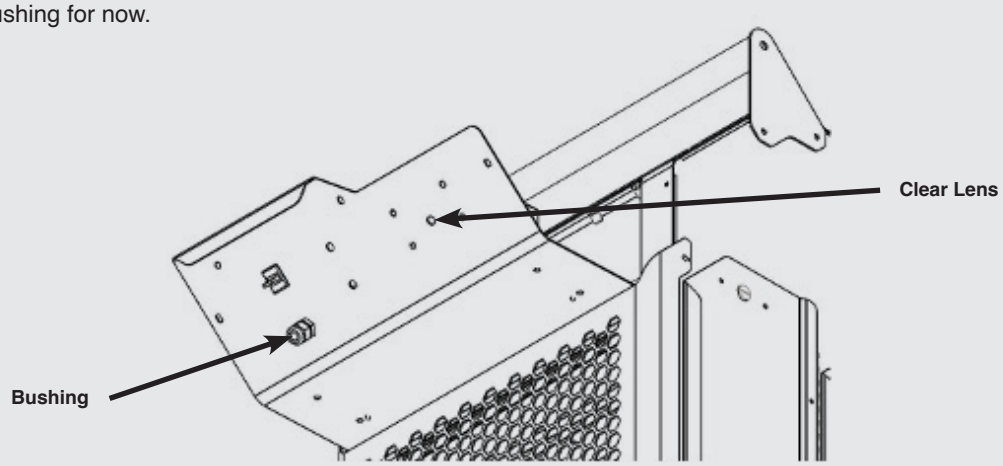


Remove the inner cord grip from the bushing to facilitate cable routing.

Unfasten the electrical hatch retaining screws and open.

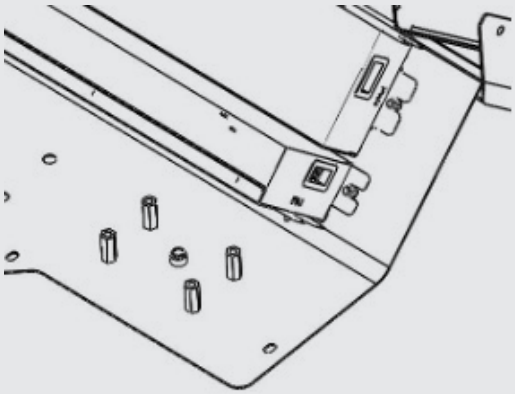


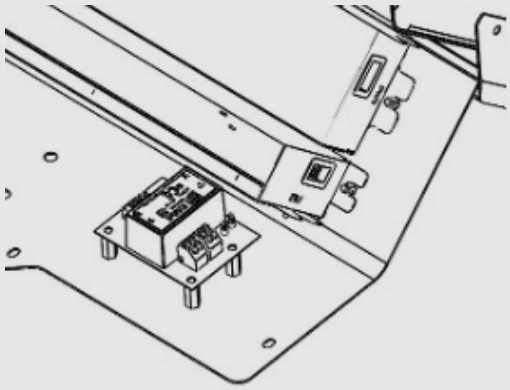
Remove the two opaque plugs and replace them with the corresponding bushing and transparent lens and its retaining ring. Do not tighten the bushing for now.



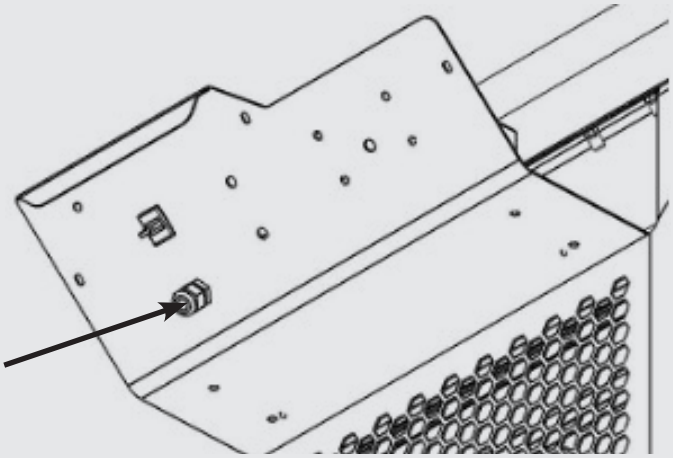

Fasten the threaded standoffs on the studs.

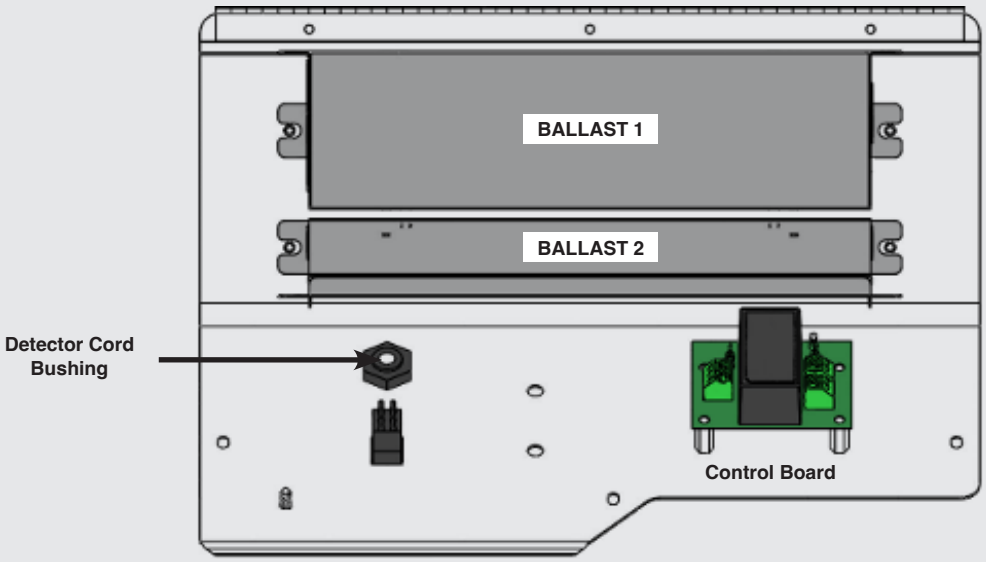
Align the control board with the standoffs in question and fasten with the provided screws.





Pass the detector cord through the bushing to reach the control board.





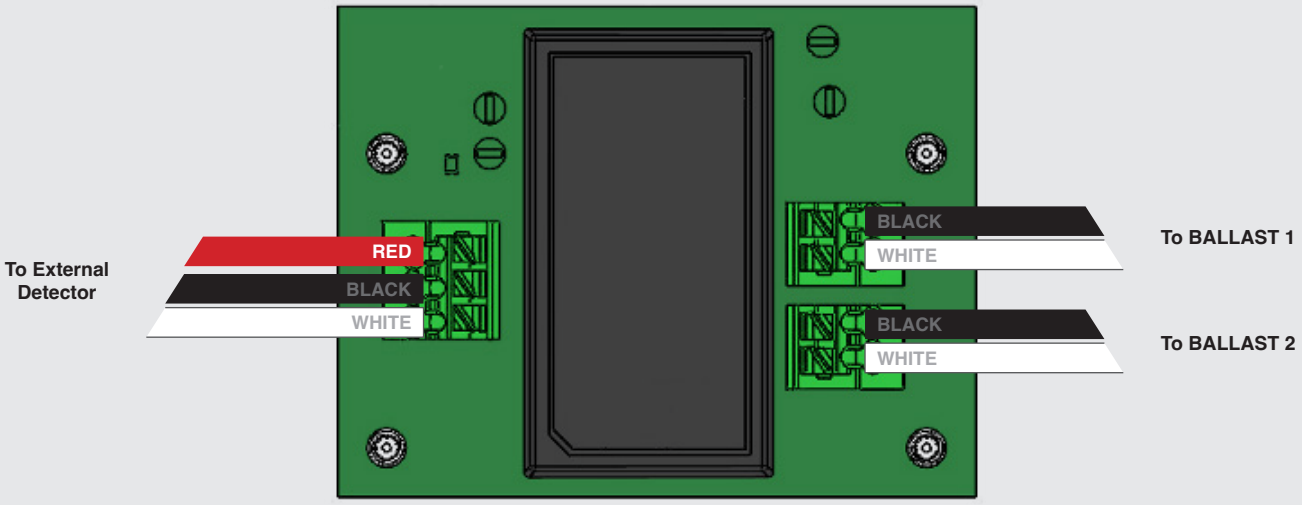

**Overview of the components relevant to the control board installation**

Use a thin flat screwdriver to unplug the black and white wires of ballast 2 (secondary) and plug them into the board.

Plug the included black and white 6" wires on ballast 1 (primary) and the board.

Plug the detector cord to the board:

- **RED wire to 12 VDC**
- **BLACK wire to GND**
- **WHITE wire to CTRL**



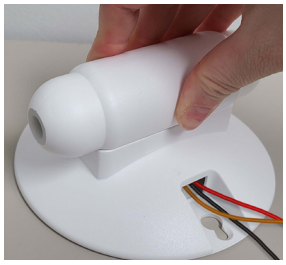

Tighten the bushing grip until it is taut.

Close the electrical hatch and screw it into the closed position.

Open the filter hatch and glue the replacement part sheet inside.

Connect the cord to the detector.

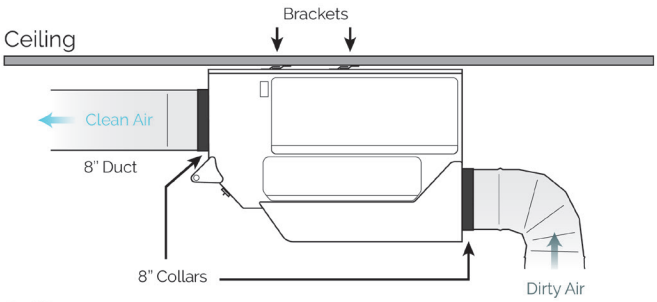
STEP 10

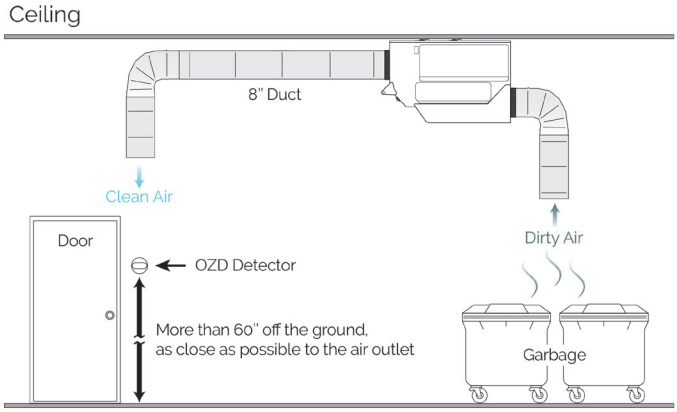


10. Now, take the OZD detector out of its packaging (2 parts). Then determine the best location to install the detector.

**Recommended installation of the OZD detector:**

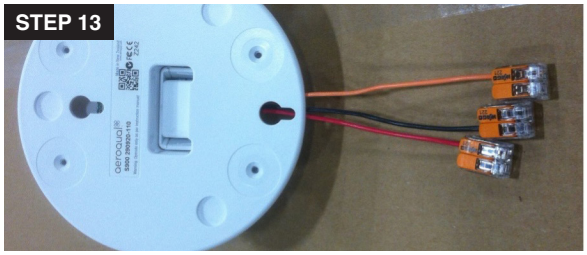
- As close as possible to the air outlet of the unit (or the duct), but not directly in the airflow;
- Preferably on a wall (for easier access);
- More than 60" off the ground.

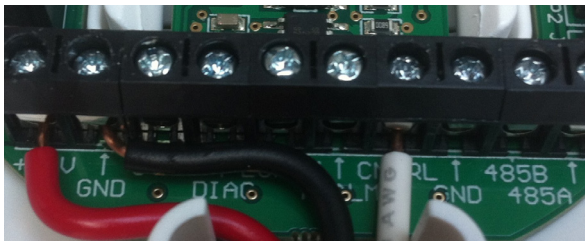



STEP 11 & 12

STEP 13






11. Install the detector on the wall using the 4 velcro stickers (included) or an appropriate screw (not included).

12. Use the supplied cable to connect your detector to your unit. If the 20' of wire are not enough, you can use BX wiring with 3 wires.

13. Connect the cord to the detector using the provided quick-connect wire connectors.

    **NOTE:** For a direct connection (connecting the M8 wires directly into the detector), unscrew and open the detector, remove the detector wires (the ones with the quick connect) and connect the M8 wires directly as shown in the picture.
    - RED wire to 12 VDC
    - BLACK wire to GND
    - WHITE wire to CTRL

14. Use the connection caps (included) to connect the wires from the connector box to the same colored wires from your unit, then replace your detector cover.

15. Turn the unit ON and wait approximately 1 tot 2 minutes for the startup phase to be completed, and for the OZD detector to calibrate. The second lamp should turn on (with the appropriate LED on the front plate).

## You are now ready use your Sanuvair® M8!

## Step by Step 'Subkit' Setup | Odor Control for Smoke Rooms (FVOC)

With this "subkit", you will need to setup: the primary MERV-9 prefilter (**FTR-19**), the primary UVC 16" 'J' lamp (**LMPHGJ160**, purple end caps), the secondary lamp UVV (**LMPHXJ160**, blue end caps), the secondary MERV-9 prefilter (**FTR-22**), a lamp control module and a VOC detector.

STEP 1

1. **Using a screwdriver, unfasten the filter hatch locks and open.**

STEP 2

2. **Remove the plastic packaging from the prefilters** and place them inside the filter bay, with the primary prefilter outwards and the secondary prefilter inwards.

   **NOTE:** Place prefilters with the arrows pointing towards the interior of the unit.

STEP 4

3. **Close the filter hatch and secure it closed.**

4. Using a screwdriver, unfasten the lamp hatch locks and open it.

STEP 5

5. **Remove the lamps from their packaging.** Be sure to wear the cotton gloves (included) ensuring the lamps are free from fingerprints.

   **NOTE:** Fingerprints on the lamps will negatively impact their UV output.

STEP 6

6. Carefully plug the lamps to the lamp connectors inside.
   **Ensure that the primary and secondary lamps are plugged into their respective connectors #1 and #2, indicated on the support bracket.** Primary lamp (**LMPHGJ160**, purple end caps) should be plugged in connector #1. Secondary lamp (**LMPHXJ160**, blue end caps), should be plugged in connector #2.

   **NOTE:** The plugs are designed so that lamps can only be installed one way. You may have to rotate the sockets 90$^0$ to line up the pins with the holes. The connectors will fit into position.

STEP 7

7. Clip each lamps to thier two supports as shown.

8. **Close the lamp hatch and secure it closed.**

9. Install the **Lamp Control Module**. Refer to the following diagrams:

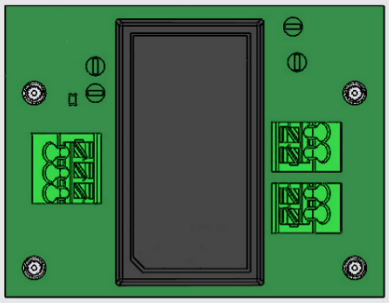
## Lamp Control Module

**What you will need**
No.2 Phillips screwdriver, 2mm flat screwdriver, long-nose pliers.

**What's included**
This package includes: lamp control board, mounting screws (4), threaded standoffs (4), detector cord bushing (1), transparent plug and retaining ring (1), 6" black wire (1), 6" white wire (1).

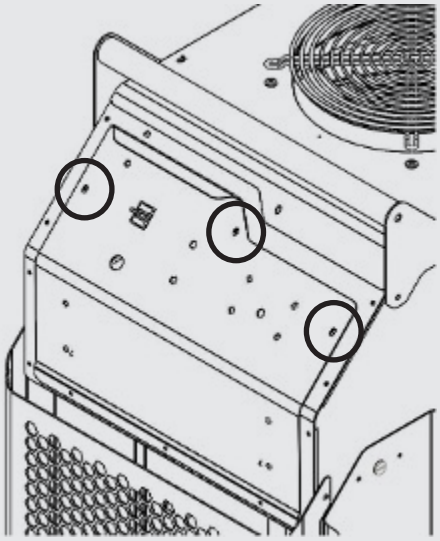
⚠ **CAUTION:** Make sure that the M8 is turned off and unplugged prior to commencing the installation.

Carefully remove the contents from their packaging.

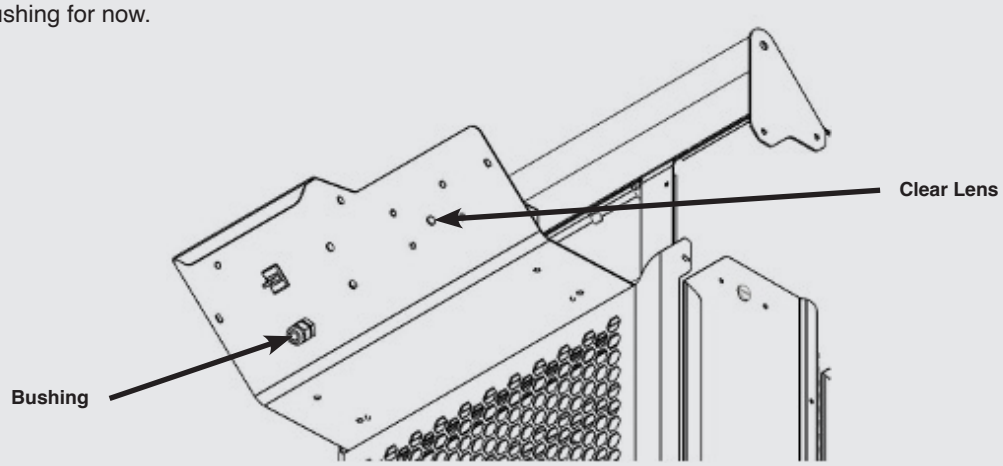


Remove the inner cord grip from the bushing to facilitate cable routing.

Unfasten the electrical hatch retaining screws and open.

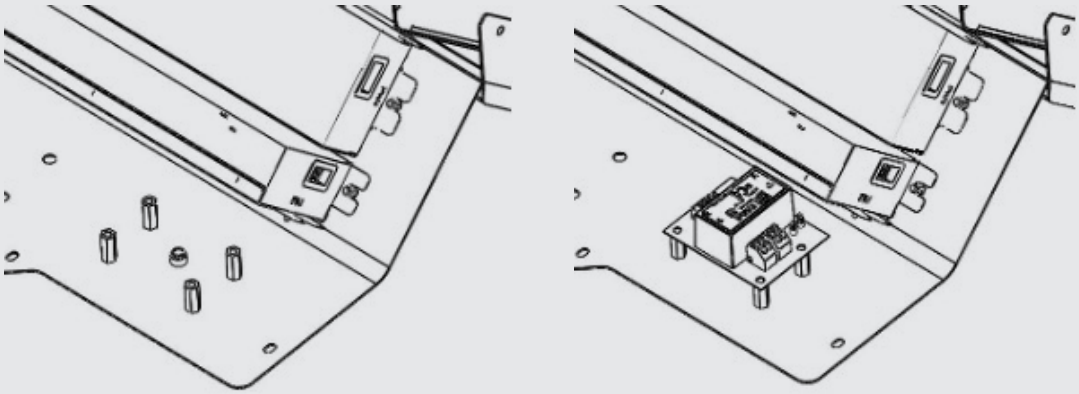


Remove the two opaque plugs and replace them with the corresponding bushing and transparent lens and its retaining ring. Do not tighten the bushing for now.

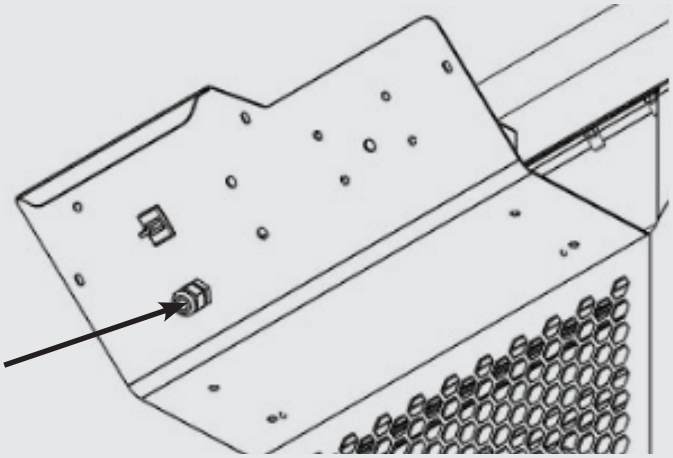


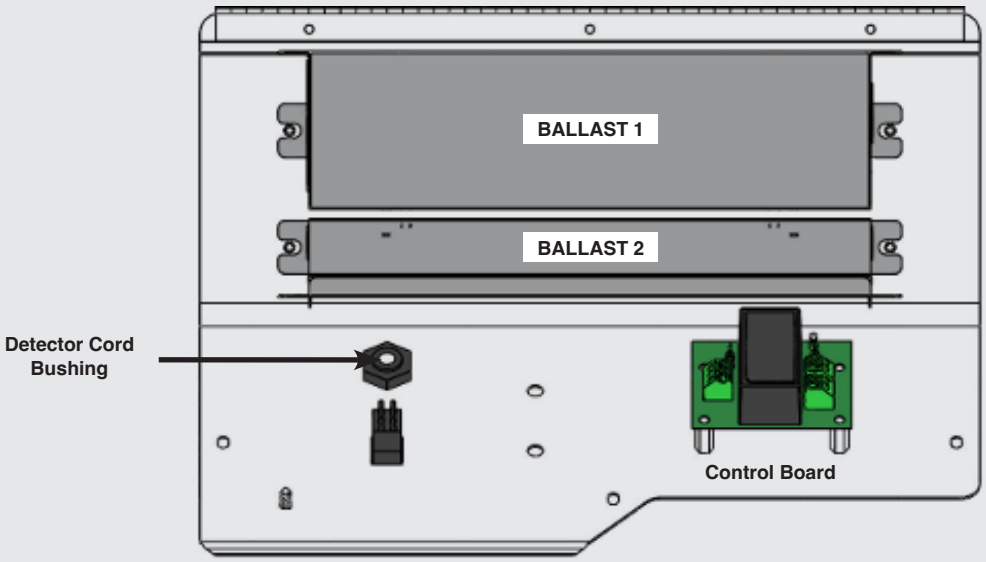

Fasten the threaded standoffs on the studs.

Align the control board with the standoffs in question and fasten with the provided screws.



Pass the detector cord through the bushing to reach the control board.





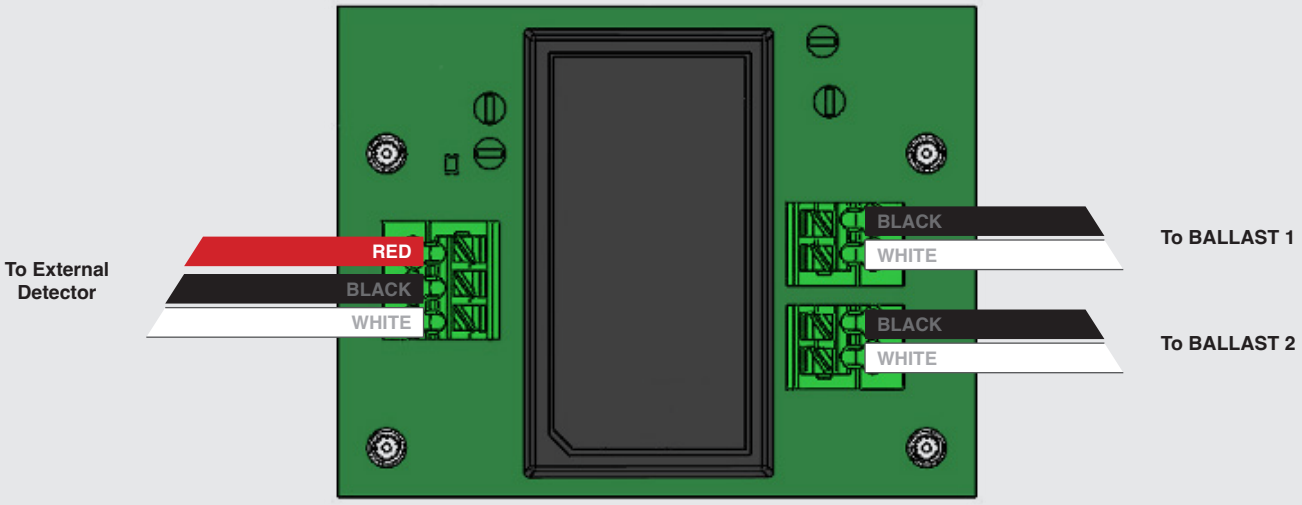

**Overview of the components relevant to the control board installation**

Use a thin flat screwdriver to unplug the black and white wires of ballast 2 (secondary) and plug them into the board.

Plug the included black and white 6" wires on ballast 1 (primary) and the board.

Plug the detector cord to the board:

- **RED wire to 12 VDC**
- **BLACK wire to GND**
- **WHITE wire to CTRL**




Tighten the bushing grip until it is taut.

Close the electrical hatch and screw it into the closed position.

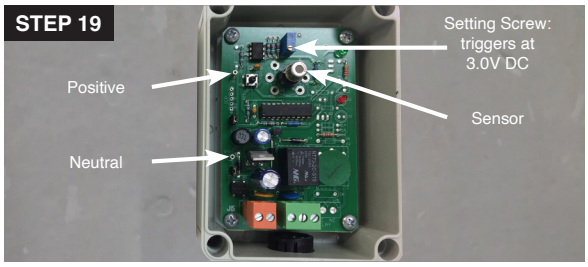
Open the filter hatch and glue the replacement part sheet inside.

Connect the cord to the detector.

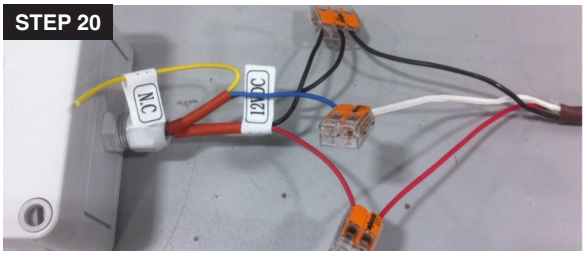
17. Now, take the VOC detector out of its packaging and determine the best location to install it.

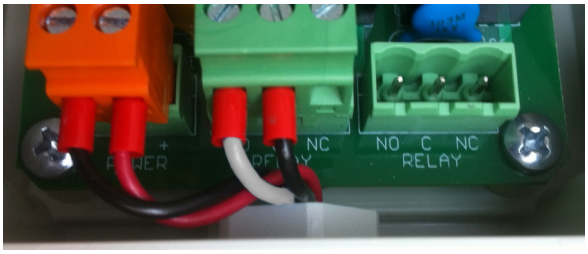
    **NOTE:** The VOC detector should be installed near the main source of volatile organic compounds (smoke, dirty air, etc.), on a wall, 6" from the ceiling.

18. Install the detector on the wall using the appropriate screws.




19. Remove the cover of your detector to make the connection: Use the supplied cable to connect your detector to your unit. If the 20' of wire are not enough, you can use BX wiring with 3 wires.




20. Connect the cord to the detector using the provided quick-connect wire connectors.

    **NOTE:** For a direct connection (connecting the M8 wires directly into the detector), unscrew and open the detector, remove the detector wires (the ones with the quick connect) and connect the M8 wires directly as shown in the picture.
    - RED wire to POWER+
    - BLACK wire to POWER- and RELAY C
    - WHITE wire to RELAY NO

21. Use the connection caps (included) to connect the wires from the connector box to the same colored wires from your unit.

22. Adjust your detector settings as needed, then replace your detector cover.

    **NOTE:** The detector is pre-set to 3.0V DC by default. To adjust these settings use a voltmeter with “alligator” type probes, as well as a small screwdriver to turn the adjustment screw. The closer your setting is to 3.0V DC, the more sensitive the detector will be and the faster it will trigger.

23. Turn the unit ON and wait approximately 5 minutes for the startup phase to be completed, and for the VOC detector to calibrate. Use a gas lighter (no flame), near the detector, which should trigger it. The second lamp should turn on (with the appropriate LED on the front plate).

## You are now ready use your Sanuvair® M8!

# OPERATION

## How to Operate your Product

The Sanuvair® M8 operates automatically: once it's installed and plugged in, simply press the power button to turn on.
To access the filters and lamps, open the respective service doors on the side. The lamp access interlock switch will stop the unit if tripped. The filter interlock switch can also stop the unit if tripped, by pulling the filter out.

Depending on your subkit selection, your M8 will operate slightly differently.

Germicidal (**FGCD**) and Odor Reduction (**FODO**): No additional steps required.

Odor Control for Garbage Rooms (**FOZD**): Wait approximately 1-2 minutes for the startup phase to be completed, and for the OZD detector to calibrate. The second lamp should turn on (with the appropriate LED on the front plate).

Odor Control for Smoke Rooms (**FVOC**): Wait approximately 5 minutes for the startup phase to be completed, and for the VOC detector to calibrate. Use a gas lighter (no flame), near the detector, which should trigger it. The second lamp should turn on (with the appropriate LED on the front plate).

## How to Select Speed

The Sanuvair® M8 features three speed settings:
The speed selector switch is located on the front of the unit, on the electronics bay service door.
It is recommended that the unit be operated at its highest speed setting to maximize the purification benefits.

| | |
|---|---|
| **LO** | Quiet operation and reduced filtration. Recommended when the room is occupied. |
| **MED** | Balanced performance between noise and filtration. |
| **HI** | Loudest ventilation for maximum filtration. Recommended when the room is empty. |

**MAINTENANCE**

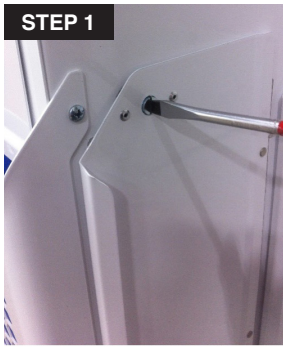
## How to Replace Lamp

Replace UVC lamp (purple end caps) every 2 years. For Odor Reduction (**FODO**) and Odor Control (**FOZD** and **FVOC**), replace UV lamps (yellow or blue end caps) every year for optimal odor reduction. Replacing lamp on the Sanuvair® M8 is quick and easy. Simply turn off the power source, open the lamp access door, remove and dispose of old lamp, replace with new Sanuvox branded UV lamp, close the lamp access door and turn power source back on. See below for detailed step by step instructions.

⚠ **CAUTION:** In order to avoid reduced performance of lamp, do not touch lamp glass without gloves.

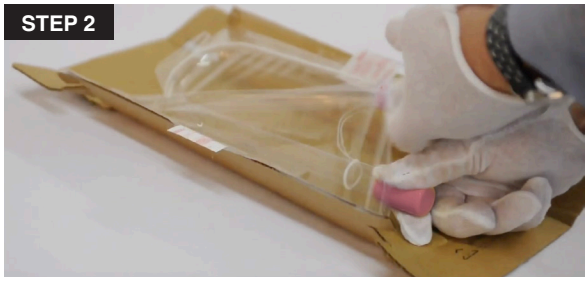
## Step by Step Lamp Replacement

STEP 1



1. To replace a lamp, unfasten the lamp hatch locks using a screwdriver and open it.

STEP 2



2. **Remove the new lamps from their packaging.** Be sure to wear the cotton gloves (included) ensuring the lamp is free from fingerprints.

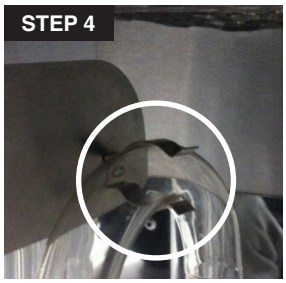
   **NOTE:** Fingerprints on the lamp will negatively impact the UV output of the lamp.

STEP 3

3. Unplug the old lamps. Carefully plug the new lamps to the lamp connectors inside.
   **Ensure that the primary and secondary lamps are plugged into their respective connectors #1 and #2, indicated on the support bracket.** Primary lamp (**LMPHGJ160**, purple end caps) should be plugged in connector #1. Secondary lamp (included with "Subkit"), should be plugged in connector #2.

   **NOTE:** The plugs are designed so that lamps can only be installed one way. You may have to rotate the sockets $90^0$ to line up the pins with the holes. The connectors will fit into position.

STEP 4

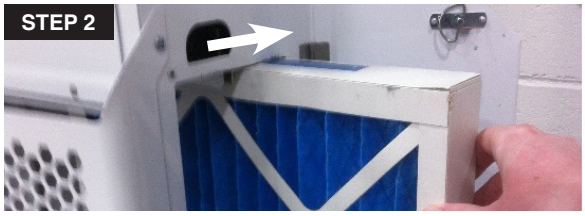


4. Insert the lamp in its mounting clips.

## How to Replace Filters

Replace MERV 9 prefilter every 3 to 6 months or as needed. Replace HEPA filter every 1 to 3 years or as needed. Check regurlarlyto maintain maximum performance of your HVAC system.

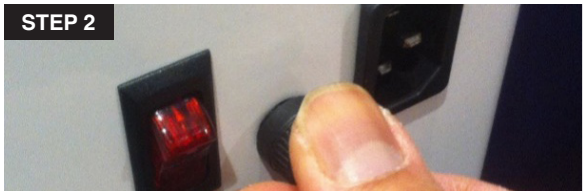
## Step by Step Filter Replacement




1. **Using a screwdriver, unfasten the filter hatch locks and open.**
2. **Remove the plastic packaging from the filters** and place them inside the filter bay, with the prefilter outwards and the filter inwards.

   **NOTE:** Place filters with the arrows pointing towards the interior of the unit.

## Step-by-step Fuse Replacement



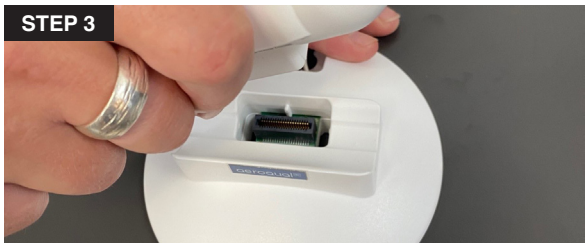
1. Disconnect the power to the unit.
2. Push and twist the fuse knob. Release and the knob will pop open.
3. Remove the fuse holder and replace the fuse with a new one.
4. Reinsert the fuse holder. Push and twist to lock into place. The holder must be inserted with a specific angle for the lock to work.

## How to Replace OZD Detector Head

Replace head every 2 years or as needed.

## Step by Step OZD Detector Head Replacement

1. Turn off the unit.
2. Prepare the new OZD detector head.




3. Remove and dispose of the old OZD detector head.

4. Connect the new OZD detector head.

5. Turn the unit back on.
6. Wait 1-2 minutes for the calibration period. Subsequently, the second lamp and ballast will turn on, indicated by the LEDs on the front of the unit.

## How to Replace VOC Detector

Replace VOC detector every 5 years.

## Step by Step VOC Detector Replacement

1. Turn OFF your unit.
2. Prepare the new VOC detector.
3. Unplug and dispose of the old VOC detector.
4. Connect the new VOC detector.
5. Turn back ON the unit.
6. Wait approximately 1 to 2 minutes for the calibration period. To test installation, use a gas lighter near the detector, which should turn on the second lamp and ballast (and their associated LED on the front panel).

## How to Clean your Product

Maintenance of the unit should be performed at the regular intervals to keep the benefits of the UV air purifier.
For optimal performance, the lamp should be kept free of dust and residue deposit. Clean when necessary with mild soap or alcohol. Always spot test the cleaner to make sure it does not damage the surface.
Once a year or as needed, clean the interior of the unit (wall and motor plate), with mild non-abrasive soap. It is recommended to use products that are environmentally friendly.

⚠ **CAUTION:** Under no circumstance should water be sprayed or splashed onto the product.

### STORAGE

The Sanuvair® M8 unit is an installation that requires no specific storage.

### ULTRAVIOLETS

Ultraviolet wavelengths (UV) emitted by Sanuvox units and systems are identical to ultraviolets produced by the sun. UVC damage nucleic acids (DNA/RNA) of microorganisms, which inactivates them. Unlike conventional UV lamps on the market, Sanuvox units and systems use a patented process that delivers a maximum dose of UV to the moving air stream or surfaces.

⚠ **CAUTION: Never expose eyes or skin to an operating UV lamp.**

### ELECTRICAL RATINGS, POWER CONSUMPTION & AVAILABLE VOLTAGE

The product is rated 120 V, 60 Hz and 450 W.
See product label to confirm power consumption of your specific unit or system.

**NOTE: IF YOU EXPERIENCE A PROBLEM, PLEASE CONTACT CUSTOMER SERVICE FIRST OR SEE YOUR WARRANTY. DO NOT RETURN THE PRODUCT TO THE ORIGINAL PLACE OF PURCHASE. DO NOT ATTEMPT TO OPEN THE PRODUCT OR TAMPER WITH ITS COMPONENTS WITHOUT CONTACTING CUSTOMER SERVICE FIRST. DOING SO MAY VOID YOUR WARRANTY AND CAUSE PERSONAL INJURY OR DAMAGE TO THE PRODUCT.**

### TROUBLESHOOTING

If your product is not working properly, refer to the following.

| Problem | Possible Cause | Solution |
|---|---|---|
| Unit doesn't turn ON. | - The power cord is not fully inserted in the unit's connector.<br>- There is no power to the electrical outlet.<br>- The door or filter interlock switch is operating.<br>- Power cord is damaged. | - Ensure the electrical outlet is powered.<br>- Check the power cord for damage and replace if damaged.<br>- Verify that the door and filter interlock switches are engaged. |
| Unit operates only on one speed. | - There are loose wires inside electrical bay. | - **Contact your contractor.** |
| Unit vibrates (balancing weight). | - An excessive dust build-up or missing on the impeller wheel. | - Check for excessive dust build-up or missing on the impeller wheel.<br>- Clean the interior of the unit. |

**Contact your contractor for all your needs in terms of replacement parts: power cord, motor, ventilator, ballast, UV lamp, etc.**

**Odor Control for Garbage Rooms (FOZD)**

| Problem | Possible Cause | Solution |
|---|---|---|
| Lamp and/or Ballast LED #2 is OFF. | - The lamp is defective.<br>- The ballast is defective.<br>- The OZD detector is faulty. | - Switch the unit off and on again. Wait for the OZD detector to calibrate (1 to 2 minutes). The lamp and ballast #2 LED lights should turn on.<br>- If ballast #2 LED is off, replace ballast.<br>- If the LED of lamp #2 is still off, test the lamp or replace with lamp #1. If the lamp is faulty, replace it.<br>- If the two LEDs (lamp and ballast #2) are still off after replacing them, change the OZD controlle |

**Odor Control for Smoke Rooms (FVOC)**

| Problem | Possible Cause | Solution |
|---|---|---|
| Lamp and/or ballast LED #2 won't turn ON when there is still smoke. | - Lamp or ballast is defective.<br>- VOC detector sensitivity need to be adjust.<br>- VOC detector is defective. | - Follow **Test Procedure A** at the bottom of the page. |

**Contact your contractor for all your needs in terms of replacement parts: power cord, motor, ventilator, ballast, UV lamp, etc.**

## Step by step Test Procedure A

1. Turn the unit OFF and ON. Wait for the Volatile Organic Compound (VOC) detector to calibrate (5 min).

2. Use a gas lighter near the VOC detector (no flame).

   Lamp and ballast LED #2 should turn ON.

3. If ballast LED #2 is still OFF, replace ballast.

   If lamp LED # 2 is still OFF, test lamp by swapping with Lamp #1. If Lamp was defective, replace lamp.

   If both LED (lamp and ballast #2) are still OFF after replacing, adjust sensitivity of the Volatile Organic Compound (VOC) detector: Attach alligator clips to the positive and neutral post on the electronic card. Use a screwdrive and adjust the screw, which will increase or diminish the voltage (factory set at 3.0 VDC). The higher the voltage, the quicker the detector reacts.

4. If both LED (lamp and ballast #2) are still OFF after replacing the lamps and ballasts and adjusting the VOC detector, change the VOC detector.

## WARRANTY

**You should first read all instructions before attempting to use this product.**
**For this warranty to be valid, keep a copy of the proof of purchase.**

REGISTER YOUR WARRANTY ONLINE AT www.sanuvox.com

| | |
|---|---|
| **UV lamp** | 2 years |
| **Ballast** | 3 years |
| **Fan Motor** | 3 years |
| **Electronics and other parts** | 1 year |

A. This limited warranty applies to repair or replacement of product found to be defective in material or workmanship. This warranty does not apply to damage resulting from abusive, unreasonable use or supplemental damage. Defects that are the result of normal wear and tear will not be considered manufacturing defects under this warranty.
**SANUVOX IS NOT LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES OF ANY NATURE, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE ON THIS PRODUCT IS LIMITED IN DURATION TO THE DURATION OF THIS WARRANTY.**
Some jurisdictions **do not** allow the exclusion or limitation of incidential or consequential damages or limitation on how long an implied warranty last, so the above limitations or exclusions may not apply to you. This warranty gives specific legal rights, and you also may have other rights which vary from jurisdiction to jurisdiction. This warranty applies only to the original purchaser of this product from the original date of purchase.

B. At its option, SANUVOX will repair or replace this product if it is found to be defective in material or workmanship.

C. This warranty does not cover damage resulting from any unauthorized attempts to repair or from any use not in accordance with the instruction manual.

D. This warranty does not cover the filters, prefilters or other accessories (if included), except for material or workmanship defects.

Call us toll-free at 1-888-726-8869 or email: info@sanuvox.com
**Please be sure to specify product name.**

**NOTE: IF YOU EXPERIENCE A PROBLEM, PLEASE CONTACT CUSTOMER SERVICE FIRST OR SEE YOUR WARRANTY. DO NOT RETURN THE PRODUCT TO THE ORIGINAL PLACE OF PURCHASE. DO NOT ATTEMPT TO OPEN THE PRODUCT OR TAMPER WITH ITS COMPONENTS WITHOUT CONTACTING CUSTOMER SERVICE FIRST. DOING SO MAY VOID YOUR WARRANTY AND CAUSE PERSONAL INJURY OR DAMAGE TO THE PRODUCT.**

## CUSTOMER SERVICE

### TO ORDER REPLACEMENT PARTS

PLEASE CONTACT YOUR CONTRACTOR OR SANUVOX CUSTOMER SERVICE
Toll-Free Phone #: 1-888-726-8869
Email: info@sanuvox.com
Website: www.sanuvox.com
**Please be sure to specify product name.**

### Replacement parts for this product

| | |
|---|---|
| **BST120/277SHS** | Ballast with multi-voltage input of 120-277 VAC, 50/60 Hz |
| **LMPHGJ160** | T6 High Intensity 16" 'J' shaped UV lamp (purple end caps) |
| **LMPHGXJ160** | T6 High Intensity 16" 'J' shaped UV (1" UVV) lamp (yellow end caps) |
| **LMPHXJ160** | T6 High Intensity 16" 'J' shaped UV lamp (blue end caps) |
| **FTR-19** | Prefilter, MERV-9 |
| **FTR-20** | Lightweight Carbon Prefilter, MERV 9 |
| **FTR-21** | HEPA Filter |
| **FTR-22** | Dense Carbon Prefilter, MERV9 |
| **ELC-MTR-24** | Fan Motor |
| **ELC-DET-OZD-15** | OZD Detector Head, Odor Control for Garbage Rooms (FOZD) |
| **ELC-DET-VOC-1A** | VOC Detector, Odor Control for Smoke Rooms (FVOC) |
| **FLEX0825** | 25' of flexible tubing (8" diameter) |
| **MSC-COL-1** | 8" collar |

⚠ **WARNING: Use only specified SANUVOX branded replacement UV lamps with your unit or system.** Use of any other lamps will void your warranty and can result in damage to the unit, system and/or lamp(s).