

# **CIMNIAIRE**1200 PAC, 1600 PAC HEPA Air Filtration Machine





# Operation and Maintenance Manual

# WARNING

Do not use with combustible or explosive material. Do not expose to water or rain. Connect only to grounded outlet with GFCI device. Disconnect power for cleaning and servicing. This equipment to be operated only by trained personnel. High intensity Ultraviolet light. Avoid eye and skin exposure. Do not operate without coverings. Do not look directly at UV light source. Wear UV eye protection.



UL 507:1997/R:2017-01 CAN/CSA-C22.2 No. 113-15

EPA Est. No: 103241-WA-1

#### Safety Warning Instructions: READ AND SAVE THESE INSTRUCTIONS

 $This \ equipment \ to \ be \ operated \ only \ by \ trained \ personnel. \ Do \ not \ use \ with \ combustible \ or \ explosive \ material.$ 

Do not expose to water or rain.

Connect only to grounded outlet with GFCI device.

Disconnect power for cleaning and servicing.

Do not operate if cord or plug is damaged. Contact a authorized service facility for examination and/or repair.

Do not run cord under carpeting. Do not cover cord with throw rugs, runners, or similar coverings. Arrange cord away from traffic areas and where it is not a tripping hazard.

High intensity Ultraviolet light inside. Avoid eye and skin exposure. Do not look directly at UV light source. Wear UV eye protection.

Do not operate without coverings.

#### Avertissement de sécurité Instructions: Lire et conserver ces instructions

Cet équipement doit être utilisé que par un personnel

formé. Ne pas utiliser avec des matières combustibles ou

explosives. Ne pas exposer à l'eau ou à la pluie.

Connectez uniquement à une prise mise à la terre avec un dispositif GFCI.

Coupez l'alimentation électrique pour le nettoyage et l'entretien.

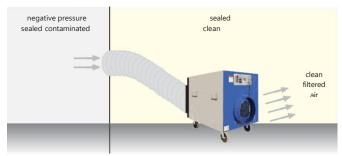
Ne pas utiliser si le cordon ou la fiche est endommagé. Contactez un centre de service autorisé pour examen et / ou réparation.

Ne pas passer le cordon sous un tapis. Ne pas couvrir le cordon avec des carpettes, les coureurs, ou revêtements similaires. Éloigner le cordon des endroits passants et où il n'est pas un risque de déclenchement.

Haute intensité de lumière ultraviolette à l'intérieur. Évitez les yeux et l'exposition de la peau. Ne pas regarder directement à la source de lumière UV. Porter des lunettes de protection UV. Ne pas faire fonctionner sans revêtement.

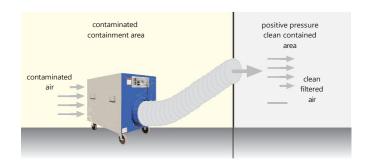
The OmniAire 1200PAC/1600PAC machines are equipped with a medical grade 99.99% HEPA filter and UV-C germicidal lights, which work together to eliminate sub-micron particulates and microbial contamination in healthcare facilities, labs and other critical environments. These units feature variable air flow, quiet operation, upright housing for a small footprint, and medical grade casters for easy mobility. Additional accessories include PEROx air purification module with hydro-peroxide generators, activated carbon filter, intake/outtake manifold, flex ducting and quick clamps.

# **Application Examples**



To create **NEGATIVE PRESSURE** inside the containment, more air has to be exhausted out than leaks into the containment. Place the machine inside the containment and hook a flexible duct to the outlet ring of the machine exhausting to outside the containment.

(See Above) All of the air being exhausted has been treated by the HEPA filter so no contaminants are being exhausted from the containment.



To create **POSITIVE PRESSURE** inside the containment, more air has to be pumped in than leaks out of the containment. Place the machine outside the containment and hook a flexible duct to the outlet ring of the machine ducting the exhaust into the containment. (See Above).

# **Specifications**

Airflow: 200-1100 CFM (OA1200PAC), 200-1600 CFM (OA1600PAC)

Power Requirements: 115VAC/60Hz/7.1A (OA1200PAC), 115VAC/60Hz/10.6A (OA1600PAC),

both models also available 230VAC/60Hz

HEPA filter 99.99% 0.3μ; MERV 10 or MERV 11 primary/secondary filter

Recessed Controls: HIGH/OFF/VARIABLE Speed Switch, variable speed controller, change filer indicating light, hour meter, UVGI lights, ON/OFF switch, indicating LED lights

Housing: aircraft grade aluminum with powder coating; silicone sealed before riveting; (1) rubber grip handle; (4) 3" Hospital grade locking casters

Size/Weight with Filters:

19"W x 42"H x 22"L; 110 lbs. (OA1200PAC), 26"W x 40"H x 20"L; 135 lbs. (OA1600PAC)

### **Receiving Instructions**

Visually inspect the unit for damage. Remove the exhaust grill on the top of the unit and inspect the HEPA filter and ensure it has not been dislodged during shipping. The HEPA filter should be sitting on the filter guides and the filter tabs that hold the HEPA filter in place should be tight.

If the filter is not seated correctly then remove the filter tabs, reposition the filter and reinstall the filter tabs before operation to ensure that there is no bypass around the filter. If the filter tabs are loose verifying that the filter is in the correct position and retighten the filter tab nuts.

# **Operations**

The OmniAire 1200PAC and 1600PAC are designed to purify air in medical environments and not suitable for abatement or restoration projects. The MERV 11 filter on the inlet side would not protect the inside of the unit from high amounts of dust.

For proper operations the machine must be operated with a HEPA and primary pleated filter in place. We recommend replacing the primary filter frequently to extend the life of the HEPA.

#### Start the Machine

To start the machine in high speed, set the rocker switch HIGH/VARIABLE speed to the HIGH position. In this position the SPEED CONTROL is disabled, and the machine will operate at its maximum airflow.

To start the machine in VARIABLE SPEED, set the rocker switch to the VARIABLE SPEED position and rotate the SPEED CONTROL knob clockwise to obtain the desired airflow. As the filters fill with dust, the efficiency of the filters is maintained, but the airflow will decrease. Change the primary/secondary filter frequently to protect the HEPA and to get more air flow. When the change filter indicating light comes on, change the HEPA filter will have to be replaced to restore the air flow.

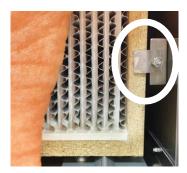
Accessories such as an optional intake manifold can be used on the intake and outlet side of the unit providing a 10" connection for the flex duct. The noise level of the unit is considerably decreased when using the intake and outlet manifolds.

# **Operating with UV Germicidal Lights**

UVGI lights are installed in the compartment facing the HEPA filter. The air passing by the UVGI lights is sterilized and the bio-contaminants captured on the HEPA are killed or deactivated. The UVGI lights should be turned on before the fan starts to run and should stay on after the air blower is stopped to complete the sterilization of the HEPA filter. The operation of the UVGI lights is controlled by the ON/OFF control switch and is monitored by the LED indicator lights on the control panel. We recommend leaving the UVGI light on for an additional 10 minutes after the air flow is turned off to sterilize the inside of the compartment and the intake side of the HEPA filter. To maintain the full effectiveness of the UV Germicidal we recommend replacing the lights after 8000 hours of operation.

Accessories such as an optional intake manifold can be used on the intake and outlet side of the unit providing a 10" connection for the flex duct. The noise level of the unit is considerably decreased when using the intake and outlet manifolds.

#### **Maintenance**



filter tab

# **Pre-Filter Replacement**

The primary/secondary pleated filter should be changed when it is loaded with dust. To change the filter, turn off the machine, slide the inlet gate out of the machine and replace the filter, then reinstall the gate.

# **HEPA Filter Replacement**

The HEPA filter purifies the air and gradually becomes loaded with sub-micron particulates. Even when the HEPA filter is fully loaded, the filter is still removing particulates from the air at the rated efficiency yet at a reduced airflow. This will affect the ability of the

machine to provide positive or negative pressure within the containment.

To replace the HEPA filter unplug the machine and lay it on its back on the handle side and remove the exhaust grill. You will see 4 filter tabs holding the HEPA filter in place (see photo). These tabs are secured with 1/4-20 Nylock nuts, which require a 7/16" wrench or socket. Remove all 4 filter tab retaining nuts and remove the filter tabs and set aside. Slide the HEPA filter out along the filter guides and remove it from the machine. ALWAYS TREAT THE USED HEPA FILTER AS HAZMAT AND PROCESS IT ACCORDING TO YOUR ESTABLISHED HAZMAT PROCEDURES.

To replace the HEPA filter ensure that the gasket on the HEPA filter faces inwards toward the flange, slide the filter in place along the filter guides and re-install the filter tabs and filter tab securing nuts. The nuts should initially be tightened to where the stud is flush with the end of the nut. This will compress the gasket on the filter approximately 1/2 of the thickness. This allows for the filter to be reseated and tightened later if necessary.

# **Replacing UV Germicidal lights**

The operation of the UV lights is controlled by an ON/OFF switch and monitored by (2) LED lights on the control panel. Each LED light indicates the proper operation of (1) ballast and (2) UV lights. If either one of the LED indicating lights turns off, then you will need to access the lights to check the operation. You will need to remove the HEPA filter as instructed above. WARNING: Wear UV protective eye wear before switching the UV light ON. Turn the UV lights ON to check which light is not lit up. Before replacing individual lights, turn the UV switch OFF. Replace the UV light tube for the light that is faulty. The light is held in with (2) clips, gently pull the light out of the two U-clips, then disconnect the 4-pin connector. If two lights next to each other are both out, the problem could be the ballast or the lights themselves. Replace one light to see if the problem is solved, if not, replace the ballast. Even if the UV Germicidal lights appear to be functioning, we recommend replacing them after 8000 hours of use for full effectiveness.

# **Troubleshooting**

Your Omnitec Design machine is designed and engineered to provide years of trouble free service. Occasionally problems occur. Here are some helpful tips and solutions:

#### The machine does not start

- 1. Check that the unit is plugged in and proper VAC is available. Select either LOW or VARIABLE speed to turn the machine on. If the red indicator light comes on, power is coming to the unit from the outlet.
- 2. Call Omnitec technical support to troubleshoot further.

#### The machine just hums when turned on

- 1. Unplug the unit.
- 2.Remove the intake gate and primary/secondary filter. Using a screwdriver, spin the blower wheel. If it does not move freely or if you hear a grinding/scrapping noise as you spin it, then the blower wheel is touching the side of the blower housing. This may be due to an impact of some kind and the motor mounts have been bent. Remove the motor/ blower assembly and replaced the bent motor mounts.

  3. If the blower spins freely, check the capacitor. With the primary/secondary filter still removed from the machine, ensure that the wiring connected to the capacitor is plugged in and not broken. Re-plug the unit into the power outlet keeping the switch in the OFF position. Then push the blower wheel and as it is spinning, turn the speed selector switch to HIGH. If the machine keeps running, the capacitor needs to be replaced.

#### The machine will run for a few minutes then turn off

- 1. The machine must have a HEPA filter installed to operate properly. If you are trying to run it without a filter in place, the motor will overheat within a few minutes and the thermal overload will engage and shut it down. Let he motor cool off for 30 minutes, install the HEPA filter and try running the machine again.
- 2. If the HEPA filter is in place and the machine still shuts off after a few minutes then the motor may faulty.

#### The machine vibrates excessively when running

- 1. This is an indication that the motor bearings are worn out. If the machine continues running, at this point the vibration will cause the center hub of the blower wheel to separate from the wheel requiring replacement of both the motor and blower. Replace the motor.
- 2. If the machine does require electrical servicing of the motor or switches the following page contains a wiring diagram to aid in repair or troubleshooting.

#### Troubleshooting UV Germicidal Lights

When the ON/OFF switch is in the ON position, both LED lights should turn on indicating that all 4 UV Germicidal lights are working. When either one of the LED lights does not come on, review the instruction for replacing the lights in the maintenance section. If the problem persists, contact our technical support team at Omnitec Design.

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120V AC version
230V AC version
Pleated Filter MERV 11
Pleated Filter MERV 10
HEPA Filter 99.99%, 0.3µ (metal frame)
Intake Manifold Kit (Manifold, Clamp & 3' Duct)
Plastic Intake Manifold (12")
Flexible Duct 10" x 25'
Quick Clamp 8-12" Dia.

Flexible Duct, Wire & Fiber Reinforced

UVC Replacement 12" Lamp

#### OmniAire 1200 PAC OmniAire 1600 PAC

 Part Number
 Part Number

 OA1200PAC
 OA1600PAC

 OA1200PAC-230
 OA1600PAC-230

 OPF1616
 OPF2416

 OPF1616-M10
 n/a

OAIM2000-12KIT
OAIM2000-12
OAD12
QCW14
OAD12R

OAH2418G

EUV12

#### Omni CleanAir LIMITED WARRANTY

This warranty policy covers Equipment (Machines and Accessories) sold by Omni CleanAir and applies to the OmniClean, OmniTec, and AgriAir portfolio of brands. Omni CleanAir warrants that our products are free from defects in workmanship and materials under normal use during the warranty period.

All OmniClean machines including the OCA500, 1200 and 1500 series, excluding consumables come with a standard two (2) year warranty. All OmniTec and AgriAir machines, excluding consumables come with a standard one (1) year warranty. Warranty covers parts and labor only, excluding consumables. Consumables (HEPA filters, prefilters, carbon filters, and UV light bulbs) carry no warranty other than to be free of defects upon arrival. Non-Consumable accessories come with a standard ninety (90) day warranty.

The warranty extends to the following parties:

- Customers (individuals or companies) to whom Omni CleanAir directly sells products covered by this policy.
- Customers (both individuals and companies) who purchase Omni CleanAir products from an authorized distributor or reseller.

This limited warranty is not transferrable or assignable to any subsequent purchaser and is only applicable in the country where the product was originally purchased.

The following circumstances are not covered by this warranty policy:

- Damage caused by an act of nature such as flood, fire, wind, earthquake or lightning.
- Damage caused during shipping or an impact event with other objects.
- Damage caused by improper care or negligence.
- Damage caused by misuse, abuse, mishandling or misapplication.
- Damage caused by alteration or adjustments by unauthorized personnel.

Under no circumstances shall Omni CleanAir or any supplier of Omni CleanAir be liable for any loss, damage or expense, including, but not limited to, loss or damage arising out of the failure of the products to operate for any period of time, inconvenience, the use of rental or replacement equipment, loss of profits or other economic loss, or general, direct, special, indirect, incidental or consequential damages or property damages.

Many states and localities have their own varied codes and regulations governing sales, construction, installation, and/or use of Equipment for certain purposes. While Omni CleanAir attempts to assure that its Equipment comply with such codes, it cannot guarantee compliance, and cannot be responsible for how Equipment is installed or used. Omni CleanAir recommends that, before purchasing and using Equipment, purchasers review the Equipment application, and federal, state and local regulations, to be sure that the Equipment, installation and use will comply with them.

Omni CleanAir offers extended warranty through the Gold Care Membership Program, for as long as membership status is maintained. For more information, please visit <a href="https://www.omnicleanair.com/resources/gold-care-membership">https://www.omnicleanair.com/resources/gold-care-membership</a>.

#### To Submit a Warranty Claim or Receive Technical Support

Contact our Technical Support Department at 425-512-0379 or by email at <a href="mailto:support@omnicleanair.com">support@omnicleanair.com</a>. Hours are Monday through Friday 7:30am – 4:00pm PST. Please have the product model name and serial number available, along with the purchase date and invoice number, if applicable. Our service technicians will work with you to diagnose your technical issue and recommend a suitable course of action to solve your problems swiftly and to your satisfaction.

If it is determined that your product is defective and under warranty, OmniClean will repair or replace, at our discretion, any faulty parts or equipment. A Return Merchandise Authorization (RMA) will be issued for the defective product.

Customer to arrange and ship the product to Omni CleanAir at the customer's expense and must use original packaging. For units that have failed within 30 days, Omni CleanAir will pay the cost of return shipping from the customer site. If Omni CleanAir determines that the Warranty Claim is valid, Omni CleanAir will be responsible for shipping the repaired product to the customer upon completion of any repairs or replacements.

In instances where equipment is damaged in transit either while being returned to Omni CleanAir or after repairs have been completed, Omni CleanAir and the customer will need to work together to resolve these situations with the freight carrier(s) involved.

- If a shipment is made on the customer's account with a third party freight carrier, the customer is responsible for filing any claim for reimbursement and will be responsible for any associated repairs or the replacement of the Equipment in question.
- If a shipment is made on Omni CleanAir's account with a third party freight carrier, and the Equipment arrives at the customer location clearly damaged, it is the responsibility of the Customer to reject the freight carrier's delivery. If the customer accepts the shipment and determines after the fact that the Equipment was damaged during shipment, the customer is responsible to provide photos, an inspection report, and any other information to Omni CleanAir within 14 days, in order for Omni CleanAir to file a claim with the third party freight carrier. Once the claim has been filed, Omni CleanAir will work with the customer to address the damage incurred.