

EMNIAIRE 1200PACHEPA 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

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.

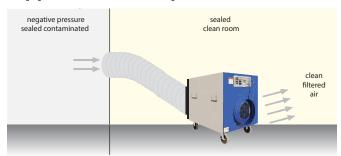
Haute intensité de lumière ultraviolette à l'intérieur. Évitez les yeux et l'exposition de la peau.

Ne pas regarder directement à la source de lumière UV. Porter des lunettes de protection UV.

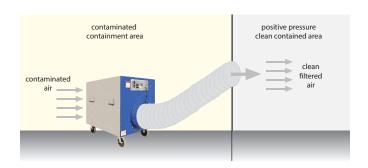
Ne pas faire fonctionner sans revêtement.

The OmniAire 1200PAC machine is 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. The 1200PAC features 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)

OmniAire 1200PAC Specifications

Airflow: 200-1100 CFM

Power Requirements: 115VAC/60 Hz/7.1 Amp (OA1200PAC); also available 230VAC/60Hz (OA1200PAC230)

Filtration: HEPA filter 99.99% 0.3µ; 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.

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 is 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.

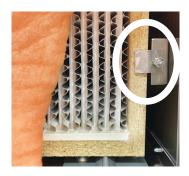
Accessories such as an optional intake manifold can be used on the intake and outlet side of the unit providing a 10" connection for the flex duct. The noise level of the unit is considerably decreased when using the intake and outlet manifolds.

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 there is 230VAC 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 screw driver, 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, insure 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 is faulty. Replace the motor.

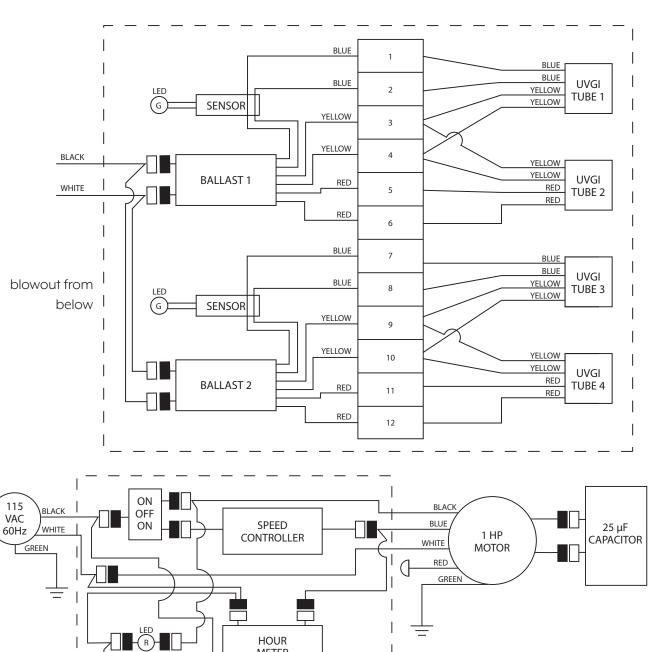
The machine vibrates excessively when running

- 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.

Ordering Info	Part #
OmniAire 1200PAC	OA1200PAC
Pleated Filter MERV 11	OPF1616
HEPA Filter 99.99%, 0.3µ (metal frame)	OAH1616G
Intake Manifold Kit (Manifold, Clamp & 3' Duct)	OAIM2000-12KIT
ABS Plastic Intake Manifold, 12" Dia.	OAIM2000-12
Flexible Duct, 10" Dia. x 25' L	OAD12
Quick Clamp 8-12" Dia.	QCW14
Flexible Duct, Wire & Fiber Reinforced	OAD12R
UVC Replacement 12" Lamp	EUV12



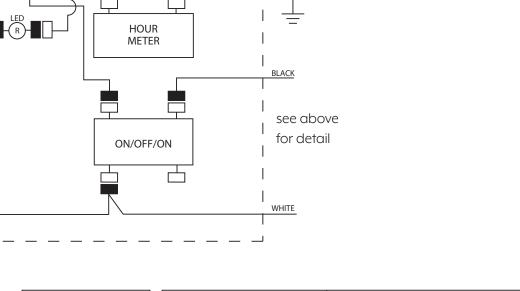


Diagram Legend			
	Wiring Connector		
0	Terminated (Capped) Wire		
R	Red LED Light		
A	Amber LED Light		
G	Green LED Light		

C ANUTEC	OA1200PAC		
ETMNITEC DESIGN	Wiring Diagram		
	DRAWN BY:		REV
4640 Campus Place, Suite 100	A. Briceno		A
T. 425.290.3922 F. 425.290.3964	SCALE	DATE	SHEET
1. 423.230.3322 1. 423.230.3304	Not to Scale	Nobember 9, 2018	1 of 2

Omnitec Design LIMITED WARRANTY

Omnitec Design warrants, for a period of twelve (12) months from the date of purchase, that all Products, component parts and accessories, excluding filters, will be free from defects in material and workmanship under normal use and service.

THE PURCHASER'S SOLE AND EXCLUSIVE REMEDY UNDER THIS WARRANTY IS LIMITED TO THE REPAIR OR REPLACEMENT OF DEFECTIVE PARTS F.O.B., Omnitec Design 4640 Campus Place Ste. 100, Mukilteo, WA 98275 Phone: 425-290-3922

In order to keep this warranty in effect for the aforementioned twelve-month period, the purchaser must (i) promptly, i.e., immediately upon discovery, inform Omnitec Design's customer service of any defects, and (ii) properly use and maintain the Product prior to the discovery of any defect.

This warranty does not cover normal wear and tear or defects caused by (i) improper or negligent handling or unauthorized modifications; (ii) defective or improper premises, chemical, or electrical influences; or (iii) weather or other forces of nature.

In order to provide the best customer service possible, Omnitec Design requests that purchaser completes the enclosed LIMITED WARRANTY REGISTRATION FORM and returns it to Omnitec Design within 30 days of purchase date.

LIMITATIONS OF WARRANTY

THIS WARRANTY IS EXPRESSLY IN LIEU OF ANY AND ALL OTHER WARRANTIES AND OBLIGATIONS OF Omnitec Design OR ITS SUPPLIERS, EXPRESS OR IMPLIED, AND Omnitec Design EXPRESSLY DISCLAIMS ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE.

LIMITATION OF REMEDY

Under no circumstances shall Omnitec Design or any supplier of Omnitec Design be liable for any loss or damage, 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.

PRODUCT SUITABILITY

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