Owner Operation & Maintenance Manual 41-1311-01/41-1313







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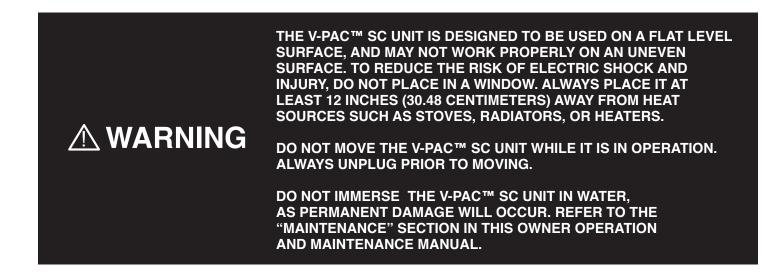
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#### 41-1320 REV A

### **READ AND SAVE THESE INSTRUCTIONS**

Always unplug the V-PAC<sup>™</sup> SC Self-Contained Air Purification System when it is not in operation, while the Filters or UV-C germicidal lamps are being changed, and when cleaning. After servicing this equipment, both the front and top grill assemblies must be reinstalled in exactly the same manner as prior to removal. If either grill is not reinstalled properly, the V-PAC<sup>™</sup> SC unit will not turn on. This is a built in safety feature.

Before using the V-PAC<sup>™</sup> SC unit, extend the power cord and inspect for any signs of damage. Do not use the product if the power cord has been damaged.



#### INSTALLING THE V-PAC<sup>™</sup> SC SELF-CONTAINED AIR PURIFICATION SYSTEM

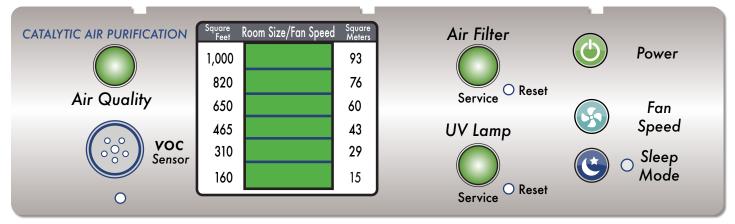
# ▲ CAUTION THIS V-PAC<sup>™</sup> SC UNIT IS FOR INDOOR USE ONLY

Before unpacking the V-PAC<sup>™</sup> SC unit, inspect the shipping container for visible damage. If you feel that you may have received it in a damaged condition, notify the shipper or supplier before opening the container. Remove the V-PAC<sup>™</sup> SC unit from the box and inspect it for damage.

Handle it carefully. Do not drop!

Place the V-PAC<sup>™</sup> SC unit in a location that will not restrict air flow through either the air inlet or the air outlet, then plug in the electrical cord at the nearest electrical wall outlet.

**NOTE:** The V-PAC<sup>™</sup> SC unit will perform a diagnostic test of indicator lights and functions when plugged in to the wall outlet. This will only happen once, unless the system is unplugged from the wall and reinstalled.



#### Figure 1

- 1. Press the Power (ON/OFF) button to turn on the V-PAC<sup>™</sup> SC unit. Lights on the control panel (figure 1) will turn on as well the UV-C germicidal ultraviolet lamp.
- 2. Look into the air outlet at the top of the V-PAC<sup>™</sup> SC unit and confirm that the UV-C germicidal ultraviolet lamp is on. You will see a faint blue glow when the lamp is on.

If the UV-C germicidal ultraviolet lamp is not on, the V-PAC<sup>™</sup> SC unit is not ready for operation.

**NOTE:** The "**Air Quality**" LED light may turn red on startup until the surrounding air quality improves. When the air quality LED is red, the air flow is automatically increased by (2) power levels. The lowest fan speed cannot be reached until the air quality light turns orange in color, and then green as air quality improves. 3. Setting the fan speed and air volume to the correct room size.

Press the "Fan Speed Button" (figure 1) until the green LED bar light underneath "Room Size/Fan Speed" reaches the corresponding size of your room. Calculations in both "square feet" and "square meters" (length x width) measurements are conveniently listed at either side of the green LED bar lights. Correctly setting this indicator will keep the air volume at an optimum level.

To achieve faster air purification, the fan speed can be increased to the maximum level.

4. Press the "Sleep Mode Button" (figure 1) at night if you desire to reduce fan noise.

A green LED light will illuminate to the right side of the button indicating Sleep Mode. This will maintain constant airflow through the purifier and reduce fan speed to a minimum. Since there is no movement in the room, purification requirements are greatly reduced.

Press the Sleep Mode Button again to return to the normal air flow mode.

#### **MONITORING OPERATION**

You can always monitor the air quality of the room.

Air quality (level of VOCs) is sensed in real time by the chemical-detection sensor (see figure 1 on page 4) which continually evaluates air quality. Air quality is expressed by one of (3) colors on the air quality LED light.

- 1. Green indicates good air quality.
- 2. Orange indicates moderate air quality.
- 3. Red indicates poor air quality.

Air volume is automatically increased by (2) fan speed levels when the air quality indicator turns red, and will reset to a preset fan speed when the air quality indicator turns orange and then green.

It is normal for the air quality indicator to temporarily be red during periods of house cleaning, painting, or cooking meals.

#### **COMPREHENDING INDICATOR LIGHTS ON THE SERVICE PANEL**

You should also keep an eye on the Service Panel which tells you when maintenance will soon be required. Indicator lights on the Service Panel ("**Air Filter**" and "**UV Lamp**") tell you if either the air filters or the germicidal ultraviolet lamp will soon need to be cleaned or replaced.

#### **AIR FILTER INDICATOR LIGHT**

Filter replacement intervals vary depending on usage and level of airborne contaminants in the environment. Filters should be inspected on a regular basis and replaced as needed.

Typical replacement intervals are:

- · Light contamination 6 to 12 months
- Moderate contamination quarterly
- Heavy contamination monthly

The system monitors usage and provides indication as follows:

- Green LED light is On The filters have been in service for less than 6 months.
- Orange LED light is On The filters have been in service for more than 5 months.
- Red LED light is On The filters have been in service for at least 6 months.

Replace the front grill and press only the filter reset button to reset timer for (6) more months. When both the "**Air Filter**" and "**UV Lamp**" LED service lights turn red at the same time, filters and UV Lamp have been in service for one year and need to be replaced.

#### **ULTRAVIOLET LAMP INDICATOR LIGHT**

The UV-C lamp has a useful life of one year (9,000 hours) with a one-month grace period.

- Green LED light is On The UV-C lamp has been in service for less than 12 months.
- Orange LED light is On The UV-C lamp has been in service for more than 11 months. It's time to order a new UV-C lamp and replacement filter set.
- **Red LED light is On** The UV-C lamp must be replaced because it has been in service for more than 12 months and may no longer be effective.

#### PERFORMING MAINTENANCE

Maintenance includes the following procedures:

- Replacing the UV-C lamp
- Replacing the filters

MERCURY

NOTICE



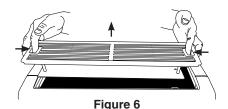
THIS DEVICE CONTAINS MERCURY IN THE SEALED ULTRAVIOLET BULB. DO NOT PLACE YOUR USED BULB(S) IN THE TRASH. DISPOSE OF PROPERLY

ULTRAVIOLET-C LIGHT IS EMITTED FROM THE BULB WHEN THE UNIT IS ELECTRIFIED, SEVERE EYE INJURY OR IRRITATION COULD RESULT, UNPLUG THE UNIT WHEN SERVICING THE BULB TO AVOID EXPOSURE OF EYES AND SKIN TO THE ULTRAVIOLET-C LIGHT.

MISAPPLYING OR MISUSING THE UV-C BULB COULD CAUSE INJURY TO THE EYES OR SKIN. NEVER USE THE BULB WITHOUT INSTALLING IT IN THE UNIT AS INSTRUCTED. NEVER OPERATE THE UNIT WITHOUT THE TOP GRILL IN PLACE. THIS PRODUCT CAN BE SERVICED OR MAINTAINED ONLY BY CHANGING THE UV-C BULB. THE BULB CONTAINS NO SERVICEABLE PARTS.

#### **REPLACING THE UV-C LAMP**

- 1. Unplug the V-PAC<sup>™</sup> SC unit's power cord from the electrical outlet.
- **2.** Using index fingers, squeeze the locking tabs (figure 6) inwards towards the center of the grill. Lift the grill up and remove.



**3.** Rotate the UV-C lamp one-quarter turn, top to rear, (figure 7) and remove lamp.

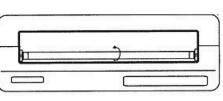
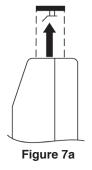


Figure 7



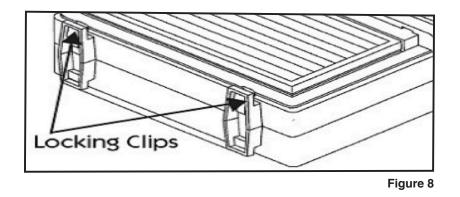
- 4. Insert the new UV-C lamp in place and install by rotating one-quarter turn (top-to-front).
- **5.** Replace the top grill removed in previous step 2 by pressing it into position until it locks. The aluminum reflector must be positioned over the UV-C lamp, nearest the front of the unit (figure 7a).
- 6. Reset the UV-C lamp timer by lightly pressing the related RESET button on the Service Panel (located directly beside the "UV Lamp" LED indicator) with a paper clip or stiff wire. The "UV Lamp" LED service light will turn green, and the 6 month timer will reset. This completes UV-C lamp replacement procedures.

## **REPLACING THE FILTERS**

Each filter set includes 2 filter cartridges; One cartridge contains a prefilter with a gas adsorption layer. The other contains a 0.3 micron high efficiency filter with a gas adsorption layer. The prefilter front surface can be vacuumed without being removed. When both indicator lights for "**Air Filter**" and "**UV Lamp**" turn red, both filters and UV-C lamp have been in service for one year and should be replaced within the next 30 days.

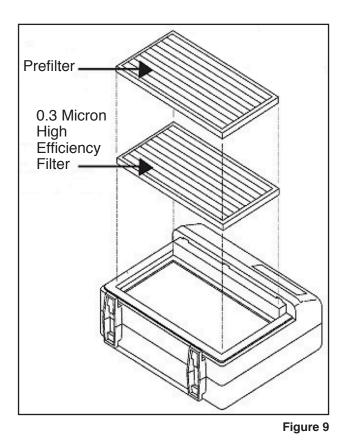
To do so:

- 1. Unplug the V-PAC<sup>™</sup> SC unit's power cord from the electrical outlet.
- 2. Lay the unit it on its back to access the metal clips, located between the front grill and bottom feet. (figure 8)



- **3.** Metal clips (2) are located on each lower side, between the front grill and feet. Using your finger or a flat head screwdriver on ONE SIDE AT A TIME, pull each metal clip, away from the grill. While holding clip, pull on the adjacent lower corner of the grill to disengage that side. Repeat disengagement on opposite side. Ensure that both lower sides remain un-clipped.
- **4.** While holding both lower sides of the front grill, pull upward to clear the feet, then downward, to pull-out the three tabs from top slots. Remove the grill entirely.
- 5. Pull out the two filter cartridges/panels and discard them.

- **6.** Insert a new, white 0.3 Micron High Efficiency Filter (marked "First Stage") into the front of the unit. Ensure that the WHITE SURFACE FACES FRONT OF UNIT (figure 9).
- 7. Align a new, white Prefilter (marked "Second Stage") on top of the first filter, or place it inside the inner frame on the loose grill. Ensure that this filter's WHITE SURFACE ALSO FACES FORWARD (figure 9).



- **8.** Re-install the front grill, by first sliding the three upper grill end tabs into the upper slots. Ensure that the Prefilter does not shift or fall out, while pressing down on the two lower corners to snap/lock.
  - **NOTE:** Ensure that the metal clips are IN FRONT of the plastic ramps or clips will not snap/lock. Check that both lower corner clips are locked.
- 9. Reset the Filter Replacement timer by lightly pressing the RESET button on the front Service Panel, using a paper clip or stiff wire. When the "Air Filter" LED light turns green, the timer has been reset. This completes filter replacement.
- **10.** Restore the V-PAC<sup>™</sup> SC unit to its normal operating vertical position.
- **11.** Plug the power cord into a wall outlet. Press the "**Power**" (ON/OFF) switch to operate the unit.

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Specifications		
MODEL	V-PAC <sup>™</sup> SC	
	41-1311-01	41-1313
Voltage	115 V / 60 Hz	220 V / 50 Hz
Power Consumption	92 watts, .77 amperes	59 watts, .26 amperes
Dimensions	21.5" W x 18.5" H x 8" D (55 cm W x 47 cm H x 20 cm D)	
Weight	23 lbs (11 kg)	
Maximum Airflow	265 CFM (8 m <sup>3</sup> /minute)	
Blower	Backward-curved motorized impeller - sealed bearings	
UV-C Germicidal Lamp	8 watts	
UV-C Germicidal Wavelength	254 nanometers	
Stage 1 Prefilter	5 micron	
Stage 2 High Efficiency Filter	0.30 micron	
Stage 1 Gas Adsorption Layer	Activated Charcoal	
Stage 2 Gas Adsorption Layer	Activated Charcoal	
Application Range	1000 square feet (auto mode)	
Service Interval	1 Year lamp and filter replacement	
Catalyst	TiO₂ Anatase	
Sound Level	48 to 68 dBA	
Agency Compliance	ETL, CSA	

Replacement Parts		
DESCRIPTION	PART NUMBER	
Filter Set (one prefilter and one 0.3 micron high efficiency filter)	41-1326	
UV-C Lamp & Filter Set (one prefilter and one 0.3 micron high efficiency filter)	41-1328	
UV-C Germicidal Lamp	41-1330	
Stage 1: Prefilter with Gas Adsorption Layer	41-1332	
Stage 2: 0.3 Micron High Efficiency Filter with Gas Adsorption Layer	41-1334	

## WARRANTY

UltraViolet Devices, Inc. (UVDI) warrants to original Buyer for one year from the date of original purchase that its goods are free from defect in material and workmanship under normal use and service. UVDI's obligation under this warranty shall be limited to the repair or replacement of those goods which prove defective, provided that such products are installed, maintained, and operated for the purpose and in the manner intended and for which UVDI instructs or recommends. Neither UVDI nor its dealers shall be liable for any special or consequential damages directly or indirectly arising from the design, construction, installation, servicing, or operation of the goods. THIS IS UVDI'S SOLE WARRANTY. NEITHER UVDI NOR ITS DEALERS MAKE ANY OTHER WARRANTY OF ANY KIND, EXPRESSED OR IMPLIED. ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE WHICH EXCEED UVDI'S AFFORESTATED OBLIGATIONS ARE HEREBY DISCLAIMED AND EXCLUDED FROM THIS WARRANTY.

UVDI AND ITS DEALERS' LIABILITY UNDER THIS WARRANTY SHALL IN NO EVENT EXCEED THE COST OF THE GOODS SOLD UNDER THIS CONTRACT OF SALE. UVDI neither assumes, nor authorizes any person to assume for it, any obligation in connection with the goods. This warranty shall not apply to any goods (a) which have been subjected to misuse, tampering, negligence, or accidents; or (b) the serial numbers of which have been altered, defaced, or removed; or (c) which have been used in a manner contrary to UVDI's instructions or recommendations. Buyer shall not return to UVDI any allegedly defective goods without UVDI's prior written authorization. This warranty may not be assigned or transferred.

