

Location

The preferred installation location for the purifier is in the return duct as the air will be treated before the filter and HVAC coil. If it is not possible to install in the return duct, it may be installed in the supply duct. The black Control Panel section of the purifier is installed on the outside of the duct. Make sure site can be supplied with the necessary power requirements. The R4000 have a power consumption of 35 watts and require a 110/220V, 50-60 Hz power source. Insure that there is adequate clearance for service. If a humidifier is present, the air purifier should be installed in the air stream before the humidifier and the humidifier must be protected from UV rays.

NOTE: The Ballast has been factory set at 110 Volts. If the power source is 220 Volt, the switch on the ballast must be changed to the 220 volt position, and the plug at the end of the wire set (R4000GX) fit with a 110/220 volt adapter, or cut off and wired into the 220 volt circuit. The operating temperature range is 40 to 150 F. Operating the models outside this range will result in decreased performance.

NOTE: The Purifiers are NOT waterproof. If installing outdoors, the purifiers must be installed in a watertight enclosure.

IMPORTANT AIRFLOW INFORMATION: The R4000GXB must be hardwired into the HVAC system. The R4000GX is energized from a pressure differential caused by airflow through the duct. The pressure switch is factory set to a differential of 0.05in. Ensure that there is a sufficient differential to activate the switch. As well, take into account that the differential will decrease as the air filter loads.

The R4000GX Control Panel must be installed in a vertical upright position for the air sensor to function properly. If the R4000GX Control Panel is to be installed in a horizontal position, or the differential is not sufficient, the air sensor must be bypassed by disconnecting the two leads on the pressure switch and joining them together with a wire nut and wiring the R4000GX into the fan circuit or the EAC terminal.

The 6" square aluminum tube can be rotated in 90 degree increments in order for the backplate and Control Panel front cover to face upward (verticle). To rotate the aluminum tube, open the front cover of the purifier. Loosen the hex head nut. Grasp the aluminum tube and rotate it in 90 degree segments. The tube will lock at each 90 degree segment. When the correct rotation is found, tighten the hex nut.

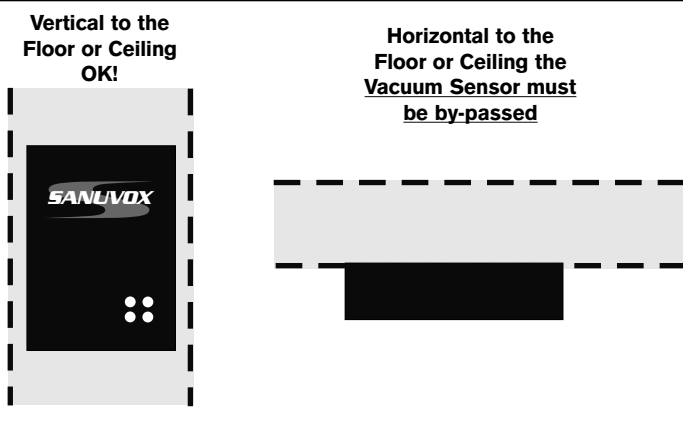
Ultra-violet light may damage certain plastics and exposed non-UVC protected wires. If any plastic or wires are within the light exposure area, wrap exposed plastic and wiring with aluminum tape or metal conduit.

VACUUM Sensor: The vacuum sensor tube is located on the backplate of the R4000GX inside a 90 degree chrome elbow. The end of the tube must face away from the airflow. If an adjustment is necessary, loosen the nut inside the control panel that holds the elbow. Rotate elbow so that it will face away from the airflow. Tighten the nut.

OPERATION OF THE R4000GX: The R4000GX has an on-off switch and a circuit breaker located at the bottom of the front cover. To operate, press the switch to the "on" position. The switch has a light to indicate that there is power. If there is no indicator light on, check the outlet for power, and check the R4000GX circuit breaker. Start the HVAC fan. The R4000GX detects airflow with the vacuum sensor. The R4000GX will only operate when the fan is on (airflow through plenum) and there is a pressure differential of at least 0.05 in.

LED Indicators

There are 4 LED indicators on the front panel. When the R4000GX is plugged in and the on/off switch is "on", the "Power" LED will be lit. If the "Sensor" LED does not come on when the fan is energized, either the pressure switch is defective, or there is not enough of a pressure differential in the duct to "pull in" the diaphragm. When the pressure switch energizes, the "Sensor On" LED light will be lit. If the Ballast LED is on and the Lamp LED is off, the UV lamp is not functioning. If both LED lights are off (Ballast & Lamp), the ballast is not functioning.



Trouble-Shooting the UV Lamp

Checking the UV Lamp

Sanuvox Ultraviolet Lamps are built to the highest standards. If the RED LED (Ballast) is lit and the AMBER LED (Lamp) is not lit, it is important to check the Lamp to insure that it is not a defect in the Lamp Sensing Circuit in the Ballast. This is done by using an ohmmeter to check the two filaments on the Lamp.

Disconnect the socket from the Lamp.

Placing the probe of the ohmmeter to one of the four pins on the end of the Lamp, touch the other probe of the ohmmeter to each of the other pins until you find the matching pin. The ohmmeter will read approximately 3 ohms (almost a short). This indicates that the filament is good. Check the other two pins. If both sets of filaments test OK, the Lamp is functioning. If one or both sets of filaments read an open circuit (infinity) on resistance, the Lamp must be replaced.

Please note that the R4000GX ballast was changed in 2009. Those R4000GX manufactured prior to 2009 had the following LED colors: Power = RED / Ballast = GREEN / Sensor = AMBER / Lamp = BLUE



WARNING

Before installing or performing maintenance or service on the purifier, turn off main power switch to unit. Electrical shock can cause injury or death. There may be more than one disconnect switch.

WARNING

Never expose eyes or skin to ultraviolet light from any source. The Purifier MUST be DISCONNECTED from power source before performing maintenance or service. Personal injury may result.

WARNING

Do not touch Lamp glass without gloves. Reduced performance of Lamp may result. Clean Lamp after handling.

WARNING

The UV Lamp contains a small quantity of mercury. If a Lamp breaks, clean and dispose of with care.

WARNING

Use only specified replacement Lamps with you Purifier. Use of an incorrect Lamp can result in damage to the Purifier and/or Lamp.

**Follow all safety codes.
Wear safety glasses and work gloves.**

PLEASE SAVE FOR YOUR RECORDS

Serial Number# _____

Date Installed: _____

Installed By: _____

Installers Contact info.: _____

Congratulations on the purchase & installation of your new Sanuvox Ultraviolet Air Purifier. Sanuvox UV Air Purifiers are the most advanced Air Purification System available having been proven to destroy up to 99.999% of Biological & chemical contaminants that circulate throughout your home or facility. Sanuvox Systems have been tested by The EPA (Environmental Protection Agency), The National Homeland Security Research Center, Medical Universities and Independent 3rd Party Laboratories.

THIS BOX CONTAINS



TOOLS REQUIRED



Step-By-Step Instruction Guide

- Follow separate Foam Gasket Instructions to install the 4 foam strips on the Backplate.
- Only break the security seal AFTER you visually inspect the Lamp.

Carefully break Security Seal located on the underside of the Lamp cardboard sleeve.
- Carefully slide Lamp out from protective sleeve. Be sure to use cotton gloves (included) guaranteeing a clean Lamp free from fingerprints.
- Tension Lever is DOWN

Slide the Lamp's porcelain end-cap (with the 4 pins) through clamp bracket. Be sure to notice the Tension Lever is down.
- Tension Lever is UP locking Lamp in place

Once the Lamp's end-cap is in place, pull the Tension Lever UP to lock the Lamp in place. If the Lever is loose, just turn Lever clockwise a turn or so.
- If the White Plug does not push on easily, just rotate the plug 180°

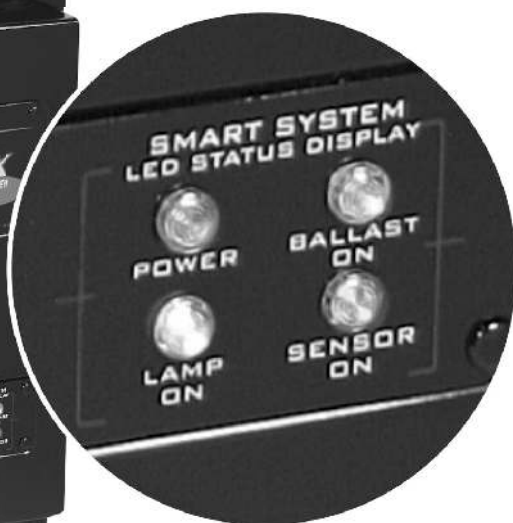
While holding the SAME side of the Lamp attached to the clamp, carefully push on the white plug.
NOTE: Although the Lamp is fairly strong, too much tension from the opposing side may break the Lamp.
- Once Lamp is installed, place and screw Turbulator to the top of the Reflecting Tube. The air must pass through this Turbulator as it enter the Reflecting Tube.
- Did you throw out the box? Don't worry! Just cut a 10.25" x 6.25" opening into the duct!

Cut-out the 'Smart Template' from the side of the Purifier's outer carton.
- Return or Supply Installation? We suggest Return, but can be easily installed on the Supply.

Draw around the 'Smart Template' outlining where the Purifier will be installed
- Cut around outline.
- Up-flow System? Horizontal duct? Not a problem. The Reflecting Tube & Lamp are easily rotatable 180°. Just visit back page for instructions.

Angle the purifier so it easily fits into the duct opening.
- Use the self-taping screws (included) to mount the purifier to the duct. Just plug into an electrical socket and turn on the red toggle switch.

Understanding The 'Smart System' LED Status Display



Please note that the R4000GX ballast was changed in 2009. Those R4000GX manufactured prior to 2009 had the following LED colors: Power = RED / Ballast = GREEN / Sensor = AMBER / Lamp = BLUE

POWER = RED
BALLAST ON = RED
SENSOR ON = AMBER
LAMP ON = AMBER

When the HVAC fan is on, ALL four LED lights should be on.

If the Ballast LED is on and the Lamp LED is off, the UV Lamp is not functioning.

If both the Ballast LED is off and the Lamp LED is off, the ballast is not functioning.

Visit the back page for wiring instructions and the Trouble Shooting.