



WARNING
Before installing or performing maintenance or service on the purifier, DISCONNECT from main power. Electrical shock can cause injury or death.

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 your 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: _____

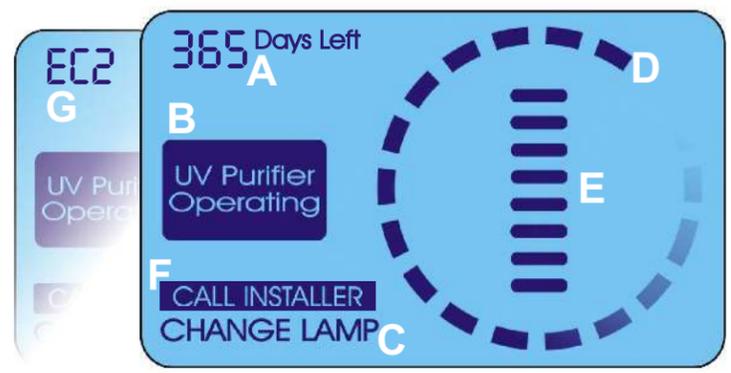
Installed By: _____

Installers Contact info.: _____

OPERATION

To start the purifier, press the 'ON' button. The LCD screen is illuminated to show that power is on. Within a few seconds, the UV lamp will energize.

LAMP OPERATING STATUS



- A. Day Counter - Provides lamp life remaining in days.
- B. UV Lamp Status - "UV Purifier Operating" will show unless:
Unit is OFF
Lamp has failed
Ballast has failed
Lamp is over 365 day life
- C. Change Lamp Indicator - After 325 days, CHANGE LAMP will illuminate, indicating that lamp will need to be replaced soon. After 365 days, CHANGE LAMP will flash indicating it is time to replace lamp. CHANGE LAMP will also stay on if the lamp fails before the 365 days is up.
- D. Timer - Rotating Circle indicates time counter. It will stop rotating after 365 days.
- E. Day Counter - Bars will reduce in number each 45 days to indicate lamp life left. At 365 days, no bars will be displayed indicating the lamp should be replaced.
- F. CALL INSTALLER icon will illuminate under the following conditions: 1) The Lamp has illuminated for 365 days and is in need of replacement; 2) when an Error-Code (i.e. EC3) appears.

Error-Code
EC1: Lamp failure
EC2: Ballast failure
EC3: 24V Power supply voltage too low**
EC4: 24V Power supply voltage too high**

**In the event EC3 or EC4 appears, the 110/24V step down transformer must be used.

MAINTENANCE

Disconnect all power before performing any maintenance or service. The ultraviolet lamp should be cleaned every two to three months. To clean, open the control box by loosening screws and pulling cover off. Next, disconnect white socket from lamp. Loosen the 3 screws on the retainer ring. Turn retainer ring left. Pull out lamp (leave it in retainer ring). Wipe lamp with a soft tissue and alcohol based solution. Reverse the above procedure to reinstall the lamp. Lamps need periodic replacement to maintain design specifications. Replace lamp after 1 year of operation. Follow instructions below on how to Reset the Timer Feature. Contact a local dealer for replacement lamps

The 'RESET Button' is used to:

- Reset an error code without losing 'DAYS LEFT'
Or
- Reset the unit back to original factory condition. This includes resetting the 'Lamp Timer' feature back to 365 days.

Soft Reset
A 'Soft Reset' is used to clear an error-code message, or used after a service call without resetting the lamp life timer.
To do a Soft Reset quickly press the reset button.

Hard Reset
A hard reset is used after a UV Lamp has been replaced with a new Lamp. Using the Hard Reset will bring the unit back to Factory Condition including resetting the Days Left to 365.
To do a Hard Reset press and hold the reset button for a minimum of 3 seconds.

Troubleshooting the UV Lamp
Disconnect the white socket from the Lamp. Ohmmeter required.
Place one 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 three 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 is defective.

Figure A. Saber GENIUS



SAFETY CONSIDERATIONS

Installation and servicing of air-conditioning equipment can be hazardous due to system pressure and electrical components. Only trained and qualified service personnel should install, repair, or service air conditioning equipment. Untrained personnel can perform basic maintenance functions such as changing lamps. Trained service personnel should perform all other operations. When working on air conditioning equipment, observe precautions in the literature, tags and labels attached to the unit or accessory, and other safety precautions that may apply. Follow all safety codes. Wear safety glasses and work gloves.

GENERAL

The ultraviolet object purifier is designed to kill odor causing bacteria, viruses, mold and fungus that may be transmitted through the ducts of the HVAC (heating ventilation, and air conditioning) equipment. The ultraviolet purifier is installed so that the UV rays treat the coil of the HVAC unit. It can be installed in the supply section inside the HVAC evaporator "A" coil facing into the HVAC evaporator coil, or from the top of the coil, shining onto the coil. The purifier is simple and easy to install in an existing HVAC unit and incorporates a quick release mechanism to clean or replace the lamp.

Mount Purifier on unit. Perform the following procedure to install the purifier:

1. Do not plug in purifier.
2. Evaluate the ideal area for locating and installing the purifier. Ensure that the purifier will fit into the plenum. Space required internally is approximately 15 inches. If the drain pan is plastic, it must be protected with a reflective material, such as metal tape or aluminum foil.
3. Ultraviolet light may damage certain plastics and exposed non-UV-C (ultraviolet energy, C-Band) protected wires or drain pan. Wrap exposed plastic and wiring.
4. Remove the control box from its package. Remove the cover of the control box from the back plate by loosening the screws on the sides of the box 1 to 2 turns. Pull the backplate off by inserting a finger in the 3/4" diameter hole and pulling back.
5. Using the backplate as a template, mark off the four corner holes and the center of the lamp access hole to be cut in the plenum.
6. Drill the four corner holes 1/8" diameter and drill a 1" hole in the center.

LAMP INSTALLATION

7. Secure the control box to the plenum using four sheet metal screws. **NOTE: Safety switch must be secured in top right corner for unit to function.**
8. Open the carton containing the lamp and remove the foam packaging.
9. Loosen the three screws around lamp retaining ring.
10. Turn ring to left and remove from back plate.
11. Insert the end of the lamp with the 4 pins through the side of the retaining ring where the rubber grommet is visible.
12. Seat lamp firmly into the retaining ring. Lamp will not move.
13. Insert lamp through the hole in back plate and then into the plenum.
14. Push retainer ring back onto the 3 set screws and turn right to lock lamp in place.
15. Tighten the 3 screws on retaining ring. Do not over tighten.
16. Connect the ceramic white plug onto the lamp pins. The plug is designed so that it can only be installed one way. If the pins are not lined up with the holes, rotate the socket 90 degrees.
17. Replace cover by lining up the three guides in control box cover and slide into place. Tighten the two screws on the sides.

IMPORTANT NOTE

The Saber Genius is designed to operate on 24vac. **DO NOT CONNECT THE TWO CONDUCTOR WIRE SET TO 110 VAC.** A 110/24 volt step down transformer is provided in the event that a 24 vac source is not available or is insufficient (Error Code EC3 or EC4 on Display). In order to install the Saber Genius using the 110/24 step down transformer please refer to the heading titled "Important Wiring Instructions"

IMPORTANT WIRING INSTRUCTIONS FOR 110 VOLT. See Figure B. below

1. Connect the two terminals from the Saber Genius to the two outer terminals on the 110V transformer (terminals are titled "AC" on the transformer). It does not matter which lead is tied to which of the two outer terminals on the transformer.
2. The transformer can now be plugged into a standard 110-volt receptacle.
3. The purifier can now be turned on by pressing the 'ON' button

For 110V: Connect the Saber GENIUS wire-set to the two outer terminals on the 110V transformer

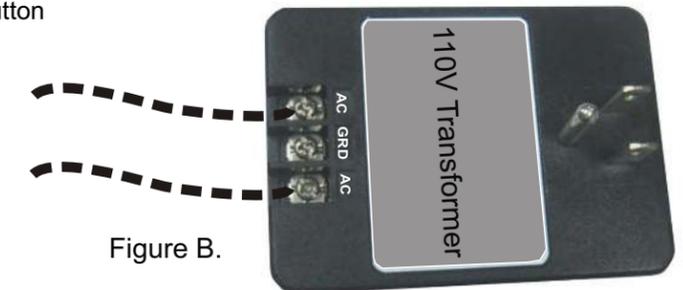


Figure B.

IMPORTANT WIRING INSTRUCTIONS FOR 24 VOLT

1. Connect the two terminals from the Saber Genius to a 24 volt connection on the equipment.
2. The purifier can now be turned on by pressing the 'ON' button

INSTALLATION

The preferred location for installation of the purifier is inside of the HVAC evaporator coil or on the top of the HVAC evaporator coil. Ultraviolet light may damage certain plastics and exposed non-UV-C (ultraviolet energy, C-Band) protected wires or drain pan. If the purifier is installed in the supply plenum or over the evaporator coil, the drain pan (if plastic) should be protected from any UV rays. Cover the exposed area with reflective material such as metal tape or aluminum foil. Ensure site can be supplied with the necessary power receptacle and that there is adequate clearance for service. Wrap exposed plastic and wiring. The purifier can be mounted in a horizontal or vertical position. More than one unit can be used if necessary.

