



Troubleshooting and FAQ For UVC Emitters and Fixtures

IMPORTANT CONSIDERATIONS

Follow all safety codes and any warnings or cautions attached to any accessed area. Consult local building codes and the National Electrical Code (NEC) for electrical wiring requirements.

Improper installation, adjustment, alteration, service, maintenance, or use can cause fire, electrical shock, or other conditions which may cause personal injury or property damage. Consult a qualified installer, service agency, or your supplier for information or assistance. Regarding the statements below, understand the signal words **DANGER**, **WARNING**, or **CAUTION**. These words are universally used for overall safety. **DANGER** identifies the most serious hazards which will result in severe personal injury or death. **WARNING** signifies hazards, which could result in personal injury or death. **CAUTION** is used to identify unsafe practices, which would result in minor personal injury or product and property damage.

WARNING: Before installing Emitter and Mounting System or performing maintenance or service on fixture, turn off main power switch to unit. Electrical shock can cause injury or death. There may be more than one disconnect switch.

CAUTIONS:

- The remote safety interlock switch must be installed at AHU access doors/panels to ensure electrical power to the UVC Emitters is automatically disconnected any time the AHU doors/panels are opened. Maintenance personnel must ensure that the UV light is off prior to working inside the AHU. Never expose

eyes or skin to UVC light from any source, as personal injury may result. Wear gloves, face shield/glasses (per ANSI Z87.1) and cover all exposed skin.

- Use only specified high-output, low temperature Steril-Aire Emitters with this system. Use of a lower wattage or incorrect Emitter can result in damage to fixture or Emitter and cause a loss of operational efficiency.
- Voltages outside of the operating range of the unit will void the warranty and will cause permanent damage to the unit.
- Emitter contains a small quantity of mercury. If an Emitter breaks, clean and dispose of with care.
- UVC energy may cause damage to non-metallic components except for some UV-rated materials. Select mounting locations that prevent exposure to vulnerable components. If mounting locations are limited, such components shall be protected with UV resistant material such as aluminum foil, aluminum duct tape, metallic shields, etc.
- Recommend installing a control panel to be integrated with the building management system to alert of failure and recommend maintenance of Emitters.

Why is the lamp not turning on?

Reset power by turning off the power for 10 seconds and turning back on.

Verify that the fixture is receiving proper voltage of 120-277 VAC.

If incoming power is good, replace the emitter with a verified working emitter.

If lamp is still not illuminating, verify proper voltage at the ballast(s) by checking incoming power to the black and white wires. If the ballast is not receiving proper voltage, ensure that all the wiring is correct and making good connections. If applicable to your product, please ensure that the rocker switch, microswitch, and any additional interlock switches are in the on position (closed).

If none of the above works, replace the ballast.

Why are only some of the emitters working in my system?

Reset power by turning off the power for 10 seconds and turning back on. Check and see if the emitters are now working. Please note that if different emitters are now lit, it is likely that the ballasts are not receiving enough power.

This issue may occur if the fixtures are on a shared power source, such as a fan. If the units are not receiving proper power, this can cause only some of the emitters to light. Verify that the emitters are on their own dedicated circuit.

If the emitters have their own dedicated circuit, please follow the steps for “Why is the lamp not turning on?” for the non-functioning emitters.

Why is the emitter dim?

Verify the fixture is receiving proper voltage or 120-277 VAC.

Check that all the wiring is making good connections.

Verify the environment of the emitter. Is the location at or below 35F? This is too cold for the emitter to operate properly.

Replace the emitter if everything has been verified.

Why is the emitter red?

Verify the environment of the emitter. Is the location at or below 35F? This is too cold for the emitter to operate properly.

The emitters will appear red if there is a contamination in the gas mixture. This is usually due to a crack in the emitter. Replace the emitter.

Do Steril-Aire UV emitters produce ozone? Do they have UL2998 or UL867?

No Steril-Aire emitters do not produce ozone. They are not UL registered; however, they have been tested by UL.

I have three emitters for the Steril-Aire UVC Controller/Watchdog, how does this work if the loads are not even?

For this application, you will be able to use (2) emitters on one bank and (1) emitter on the second bank. When the watchdog registers the current, a reference between the amperage of bank 1 and bank 2 is noted. If either of the banks drops from the reference point, the UVC Controller/Watchdog will register a fault for that bank. Please see the IOM for additional information.

Can I have the emitters turn off and on with the unit?

Although Steril-Aire emitter life is 9000 hours of use, Steril-Aire recommends that the emitters are on 24/7. By turning the emitters off and on in intervals, this can cause the filaments and internal components of the emitters to weaken, causing a premature failure.

How do I protect non-metallic objects in the mounting area from UV-C?

Mounting locations should be selected to prevent exposure to components vulnerable to UV-C (Non-Metallic and Non-UV rated). If the mounting locations are limited and these items can not be avoided, non-UV resistant components should be protected with UV resistant material such as aluminum foil, duct tape, metallic shields, etc.

Do Steril-Aire UV emitters contain mercury?

The Mercury content is less than 12mg per emitters.

Minamata Convention Annex A does not include UVC lamps.

UV Germicidal lamps remain exempt from Hg bans due to certain clauses of regulations, i.e. the EU's RoHS/REACH. EU and other entities continue to extend exemptions in the absence of a reasonable alternative.