



## Ultra254™ Auto Disinfector

### Frequently Asked Questions

Q: What's the product's name?

A: Ultra254™ Auto Disinfector. The model number is 950.

Q: Does it kill COVID-19?

A: UVC light neutralizes viruses and other microorganisms when they are exposed to a high enough dose of light. The dose is the intensity of the light multiplied by the time, which translates to a higher dosage which is more effective in disabling the SARS-CoV-2 virus that causes COVID-19. There's a June 2020 [published study](#) from Italy that concludes:

"At a virus density comparable to that observed in SARS-CoV-2 infection, an UV-C dose of just 3.7 mJ/cm<sup>2</sup> was sufficient to achieve a 3-log inactivation, and complete inhibition of all viral concentrations was observed with 16.9 mJ/cm<sup>2</sup>"

This result agrees closely with a [recent study](#) of virus surrogates suggest that a dose of 26 mJ/cm<sup>2</sup> is adequate. The 12-minute treatment time of the Ultra254™ tool provides a dose of 40 mJ/cm<sup>2</sup> as [recommended by the International Ultraviolet Association](#).

The Ultra254™ provides a dose that is at least 50% higher than the available studies suggest is needed.

Q: How does it work?

A: The lamps used are standard germicidal lamps that are very similar to the compact fluorescent lamps you probably have in your home. The difference is the gas they are filled with and the gas pressure have been changed so that an invisible, high-energy wavelength of light at 254 nm is produced. This wavelength of light is easily absorbed by microorganisms and it breaks some of their internal chemical bonds making them unable to replicate.

Q: Why can I see violet light?

A: 90% of the light from the lamps is at 254 nm which is invisible to humans, but the remaining 10% of the light is harmless violet light.

Q: Is it safe?

A: People should not be in the vehicle when the lamps are operating. The UVC light is strong and harmful to skin and eyes similar a sunburn and can cause damage in less than a minute.

Once the light is off the unit is harmless. The vehicle glass protects people on the outside of the vehicle by blocking the harmful UVC light.

Q: Can you ship it internationally?

A: Not at this time.

Q: Is it a regulated product? Does it have to be approved or licensed for use by a government agency?

A: UV lights are regulated by the EPA since they kill unwanted 'pests'. CoScientific LLC is registered with the EPA and is required to label each unit with our establishment number which is 96844-AZ-1.

Q: What is the warranty and/or service life?

A: The warranty period is 90-days and we offer a quick return and replacement if needed. The lamps have a service life of 6,000 hours.

Q: Could my insurance company pay for the product?

A: We haven't investigated this avenue yet, but we would support your paperwork requirements if needed.

Q: How soon can you deliver?

A: Depending on the quantity, we can ship immediately to 3 weeks. The included battery requires ground shipping.

Q: Do you have a technician available for training my staff?

A: We would happy to have a video call to introduce a user to the tool and answer questions.

Q: What about the back of the steering wheel?

A: Since UV light is line of sight, shaded areas like behind the steering wheel would need to be disinfected by hand cleaning. This is also the case for heavy debris. The advantage of UV disinfection is that the hand cleaning can be very brief, and the UV is a strong complement to cover areas that are difficult and labor-intensive.

Q: Does UV hurt the interior of the car?

A: UV exposure can yellow/crack plastics and fade fabric at high, repeated exposure. This was a much bigger problem in the past for car manufacturers so UV inhibitors are now widely added to materials that are expected to receive sun exposure. Chemical-based cleaning can also cause issues, so it's a judgment call on what approach works best for the situation.

Q: Isn't UV harmful for your eyes and skin?

A: Correct, you should not expose your eyes or skin to UVC. A vehicle's interior is a safe application since glass blocks the harmful 254 nm UVC wavelength of light. We have a 1 minute delayed start built into the tool for safety and an automatic shutoff after the 12 minute treatment time. There is also an illuminated red button that stops all operations immediately.

Q: What's that smell?

A: UV lamps and equipment don't put off any smell on their own, but because there are dead human skin and hair cells in the vehicle, the UV will break down the keratin in the cells and emit various sulfur-containing gases. The bad news is your nose is excellent at detecting gases that smell like burning rubber and rotten eggs. The good news is that they are at such low levels, they are not harmful to your health. The smell usually dissipates within a few minutes and is less prominent with each treatment. The plus side is you know its working!

Contact us with your own questions

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