

## **AUVS Germicidal UV Enclosure "UV Box" Questions**

The UV Decontamination Box (KR615) is designed to decontaminate non-critical items, and protect staff, visitors and patients from cross contamination with MRSA and C-Diff.

Operation: Plug unit into 110volt standard outlet, turn power switch on, green light illuminates, turn knob and open door, place item to be decontaminated in box, close and turn back the knob lock door, press red button (lights up during 55 second cycle). When red light goes off decontamination is done. You might notice a slight Ozone smell when the cycle is complete.

Decontamination cycle: 55 seconds, tested to kill over 99.99% of MRSA and C-Diff spores.

Can I put anything in the box? Yes, will not harm electronics. Devices from smart phones, to iPad tablets, Glucose monitors, cables and lead wires, Stethoscopes, BP Cuffs, temperature probes, personal items, etc.

Limitations? No, you cant lay things over each other in the box. If the UV light can't hit it, can't decontaminate it.

How do I know the box is working? On the front of the box is a plastic bubble that will turn blue when the UV lights are on.

Will it work with one of the two UV lights burned out? No the lights are wired in series so if one light burns out the other wont come on either

Can I test the box? Yes, there are yellow UV tabs that turn green when placed in the box and a cycle is run.

Any maintenance? Lights should last 16,000 hours or about 1,000,000 disinfection cycles, that's about 25 years with heavy use. If the chamber is very dirty, inside reflectors in the box can be cleaned using a mixture of alcohol and water (1:1). Residues of alcohol based cleaning products are easily wiped away with a water-soaked cotton cloth.

Cleaning the outside of the box? Its aluminum, similar construction to any medical carts, whatever you use to clean them is fine.

Safety? UV light does not come in contact with staff or patients, completely enclosed decontamination chamber. If you open the box before the cycle is over the lights turn off.

PVC or Latex? Some plastic used for door lock and hinges.

Mounting options? The UV Box can be wall mounted, desktop or mounted to a cart. A battery portable option is available.

What other testing? The UV –Box is UL listed and has also been comparatively tested with other phone and iPad disinfection systems by ECRI.

If the UV Box breaks what do, I do? Call 716-525-2127, we will send a new box to you. Pack the damaged unit up using the box we shipped the replacement in and ship it back to the factory.

What is the size of the box? 20" wide x 10" deep x10" tall and weighs about 10 lbs.

Does the box clean devices? The box does not clean, it sanitizes which means it kills 99.99% of MRSA and C-Diff spores. For example if you had 1,000,000 of the bugs on the surface of a device, 999,000 would be dead after a 55 second cycle in the UV-Box.

Should I wipe down the device before placing it in the box? Yes, wipe down the device per the facilities before sanitizing it. Microfiber is a good option.

Does UV hurt my electronics? No, UV does not, all electronics are shielded from UV now.

What does UV do to the plastics of devices? First if we consider the objective here to kill/sterilize surfaces of devices, most being electronic, usually installed in a plastic housing and C-Diff being our biggest challenge.

The concern is that UV degrades polymers, this is true but keep in mind that most plastics especially those found in phones, tablets, and medical devices have UV stabilizers mixed into the ingredients before they are injection molded so the effect is usually just yellowing over time.

The other item to keep in mind is that the lifespan of almost all products placed in the UV-Box is typically far shorter and will be replaced due to upgrades well before any change to the plastic is noticed,

Devices are already exposed to UV with the UV robot used for disinfection so that effect has already been taken into account.

Finally look at the alternative. To kill C-Diff spores, which is the ultimate objective of this program, you have to use bleach, sodium hypochlorite. I would contend this is far more damaging to devices than UV would be. Long term exposure to bleach can damage many different plastics, it a strong oxidizing agent. In addition of a spray is used rather than a bleach wipe this is contrary to the public health notice of October 31,2007 from the FDA, CDC, EPA and OSHA avoiding hazards with using cleaners and disinfectants on electronic medical equipment.

How expensive is the UV-Box compared to other options? According to ECRI's study the UV box is ½ the cost of the next lowest cost UV sanitizing device over a 10 year period.

This FDA, CDC, EPA and OSHA notification limits hospitals to bleach or disinfectant wipes which cost hospitals on average \$0.40 per sheet. The UV-Box will last without changing lights 1,000,000 disinfection cycles, that same number of disinfections with wipes would cost \$400,000 and fill a landfill.

If I have my cover on my phone or iPad will it be disinfected? If the UV light does not hit the surface it will not disinfect.

Lock UV-Box door turn dial to start cycle

Power is on light, turns green



Bubble turns blue when the UV lights are on

Sanitizing cycle on light, turns red

UV lamps top and bottom of the UV-Box

