

Welcome to your
CX4 Cleanbox!



Welcome!

Welcome to your new CX4 Cleanbox disinfection and drying system for use with VR and AR headsets.

We congratulate you on your decision to keep your guests and employees clean and safe by utilizing an environmentally-green product that generates no waste while also consuming very little power.

The CX4 has been designed to not only effectively eliminate bacteria, viruses and fungi from the headsets at your venue, but also to dry all sweat, body oil and other fluids from those headsets so that your guests are never subjected to those unsavory conditions.

We've also engineered the CX4 to enhance your venue with a high-tech appearance, as well as ambient RGB lighting that changes as the cycle progresses so your guests can see the cleaning cycle in process and be assured that your venue is caring for their well-being.

Thank you for purchasing this Cleanbox product. We hope that you and your venue will be rewarded with greater guest satisfaction and security and the increased revenue that their happiness will generate through word-of-mouth enthusiasm.



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Packing List

- The CX4 Cleanbox unit
- Power cord
 - The included cord is appropriate for the country to which the unit was initially delivered.
- Fabric nanotech fluid in spray bottle, 2 oz.
- One microfiber cloth



Unboxing your CX4

- 1) Remove the power cord and nano bottle from the foam packing at the top of the unit.
- 2) Remove the literature packet from the top of the unit.
- 3) Remove the top foam insert. Discard.
- 4) Lift the CX4 from the box.

You have successfully unboxed your CX4 unit!



Using your Nanotech

Your unit comes with enough of the nanotech fluids to keep your headset protected for more than a year. They make the interior surfaces of your headset(s) hydrophobic so that liquids and body oils will not penetrate the surface materials, making it very easy for the accelerated air system in the CX4 to dry those surfaces and remove any dried detritus left behind.

To prepare your headset for use, follow these simple steps:

- 1) If your headset has already been under heavy use, clean it thoroughly, getting the surfaces as free from dirt and grime as possible.
- 2) Use the “Velcro and Fabric” spray:
 - a. Spray any cloth, foam rubber or Velcro areas on your headset. Saturate thoroughly.
 - b. Let it dry until the surfaces are dry to the touch anywhere from 30 to 120 minutes, depending on how heavily you applied the textile coating. Overnight is even better.
- 3) Your headset is ready for use as soon as it is dry to the touch, but the nanotech coatings will continue to mature until 24 hours have passed. At that point, your headset will be completely protected with coatings that should last for many months.
- 4) You do not need to reapply for a long time. If you put a drop of water on the surface and it beads up and doesn't soak in, then the nano is still working and there is no need to reapply!
- 5) Your starter bottle of nano should be more than enough to prepare at least 10 headsets.

If some very sticky material (like makeup or candy) comes in contact with the surface, you can usually use a dry microfiber cloth to clean the surface. The general rule of thumb is: Wipe your headsets down with dry microfiber cloths daily or anytime you notice anything on a surface.



Centering Your Headset

There are many different sizes and shapes of VR/AR headsets available currently. To accommodate them, we created an adjustable visor hanger so that you can easily adjust the up/down and front/back positions of your headset in relation to the UVC cone. This allows the lights to shine on the most important surfaces to disinfect and ensures that the air jets are hitting the most important surfaces to dry.

The adjustments are simple.

- 1) Center your visor properly: Be sure that the visor hangs properly around the UVC cone.
 - a. When looking from the front, the headset should be centered both left/right and up/down.
 - b. To adjust the up/down centering, loosen the top two thumbscrews on the visor hanger and move the hanger until the visor is centered. Then tighten the thumbscrews to retain that position.



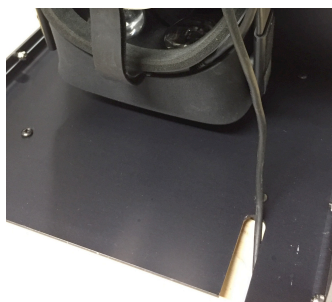
- c. When looking from the side, the visor should hang so that the edges of the visor are centered between the front and back edges of the white cone area.



Operating the CX4 Cleanbox Unit

The CX4 is simple to use. Open the door, hang the headset on the hook, close the door, and push the silver button. However, detailed instructions are included below to fully explain what is happening at each step and in case you have questions.

- 1) Turn on the power to the unit by toggling the switch on the back of the CX4 to the “-” position. (The “o” position on that switch is the “off” position.)
- 2) Open the front door. There is a magnetic catch to ensure the door closes firmly.
- 3) Turn the headset to be cleaned so the rear of the headband is pointing upward.
- 4) Hang the headband on the Visor Hanger inside the CX4. Center the strap so that the lens unit hangs straight below the central Halo of the unit.
- 5) If your headset is tethered, be sure the cable tracks down through the cable notch in the bottom of the CX4 so that the door closes properly over it.



- 6) Close the door.
- 7) There is a green light lit showing through the front door of the unit. There is a silver button next to that green light. Push that silver button. (This is known as the “activation button”).



- 8) The cleaning cycle is now engaged. For 60 seconds, the following will occur:
 - a. The green light on top of the box goes out and a red one activates. This shows you that the cleaning cycle is in progress.
 - b. The accelerated air system runs for the entire 60 seconds, moving high-velocity air across all surfaces of the headset that need to be dried.
 - c. The UVC lights bathe the interior of your headset completely, corrupting the DNA of any viruses and bacteria there so they cannot replicate, making them unable to cause harm.
 - d. Ambient RGB lights turn from deep purple to a clean blue over the course of the cycle so that your guests have visual indication that the cycle is progressing.
- 9) After 60 seconds, the red light showing through the front door of the CX4 extinguishes and the green one is relit. The cycle is now complete.
- 10) Remove the headset from the CX4, which is now completely disinfected and dried for the next guest.



Damage

Sometimes, despite the best precautions, damage happens.

Here's what to do when things go wrong.

Damage During Shipping

If your unit arrives to you with damage, please do the following:

- Take pictures of the packaging, showing any damage to the exterior of the box. Please show all sides of the box.
- Take a close-up picture of the shipping label, showing the tracking number and all address information.
- If you can see the damage when you first open the box, please take a picture of the box with the damage showing and all of the packing material intact.
- If you didn't see the damage until it was unboxed, please take a picture of that also, then also take a picture of the box with packing material inside.
- Lastly, please record the serial number. (Serial number is shown on the back of the unit, in the lower, right corner and is on a small silver sticker.)

Please send those pictures, and a description of what is wrong with the unit, to the sales person that you worked with to get the units delivered. They will ensure that we can work with you to ensure that the situation gets fixed asap.

Product Arrives Intact but Doesn't Function Properly

If this happens, please contact your sales person and they will set up a video conference to troubleshoot the problem with you. If the issue can't be quickly resolved, we will replace the unit for you.

Damage After Receipt

If your unit arrived safely, functioned properly, but then suffers damage while you were using it thereafter, please go ahead and contact us anyway. Depending on what the damage was, we may be able to help.



How to Pack for Travel

We highly recommend that you spend some time packing your unit properly for travel before taking it on the road. The CX4 is a robust piece of equipment, but baggage handlers and shipping companies can be very rough and you don't want your unit to arrive in a non-working state.

- 1) Use at least a double-walled box. You want a robust container to prevent your unit from being damaged. You can also consider a Pelican case. If so, we use the Pelican Storm iM2750 Case with Foam when we pack for our own shows and it has served us well.
- 2) Eliminate **all** empty space. This includes inside the unit. The more empty space there is, the more the unit can shift around and any shifting lets momentum build, which is how damage occurs. Pack the inside of the unit with bubble wrap or paper. Wrap the unit in bubble wrap and use corner protectors on the unit, if possible. Once the unit is in the box, fill every empty space with bubble wrap or peanuts. Do everything you can to eliminate the possibility of shifting.

That's it. You should be good after that. Seal the box securely and send it away.



FAQ

- 1) Will the device keep running if I open the lid/door during a cleaning cycle?
 - a. There is a door switch that triggers when the lid/door is opened to protect your guests and employees from misuse of the CX4. The CX4 is designed to cease functioning if the unit has power, but the door is open. If anyone opens the door while the cleaning cycle is in progress, the cycle immediately ceases. The cycle can be restarted by closing the door and pushing the activation button again.
- 2) Can UVC light harm my headset's material or its lenses?
 - a. No. UVA (outside light) or UVB (as used with tanning beds) can penetrate glass or plastic and thus can cause damage to the more delicate systems in your headset. However, UVC (medical grade) light is stopped by any thickness of plastic or glass and your headset is completely safe from harm while being disinfected by it.
- 3) If I stare at the lights while the cleaning cycle is running, can I hurt my eyes? Or get a tan while being exposed to the light?
 - a. No. As mentioned above, any amount of glass or plastic stops UVC dead in its tracks. The acrylic walls of the CX4 are complete protection against the UVC light and the system will not run when the door is open. You are safe.
- 4) How many amps does a CX4 unit draw?
 - a. Less than 2.8A per CX4 unit.

Certifications & Warnings



This product converts household current to 12V power for use by its various functions. As such, it is a high power source and high electrical source and should be treated accordingly.

The Cleanbox CX4 rear enclosure is designed to be accessed by trained maintenance technicians only. It is highly recommended that you do not open this compartment without disconnecting all power sources.

The Cleanbox CX4 unit has one power inlet which accepts 100-240V, 50-60hz power sources.

FUSE WARNING: Use only a 5A, 250VAC fuse when replacing the fuse for any reason.



UV Light can be a skin and eye irritant if you are exposed to the light directly without any form of protection. However, the acrylic enclosure of the Cleanbox CX4 unit blocks all UV-C radiation. Do not circumvent the safety systems of the Cleanbox CX4 unit and you are safe.

This Cleanbox CX4, model number 01-01CX4, is rated to handle power input of 100-240V, 50-60Hz.



Supplier's Declaration of Conformity

47 CFR § 2.1077 Compliance Information

Unique Identifier

Cleanbox CX4, model number 01-01CX4

Responsible Party

Cleanbox Technology, Inc.

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17th Floor

Nashville, TN 37201

615-208-4042

www.cleanboxtech.com

FCC Compliance Statement

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.



Independent Testing Procedures

How testing works:

There's only one way to definitively determine the efficacy of UVC light: Pathogen culturing & counting.

The testing process:

- Contaminate a surface on the visor with a known pathogen (i.e. harmful bacteria such as MRSA).
Disclaimer: Use a professional lab service to do this. Do not attempt this at home.
- Take a swab of that surface and put it in a petri dish with an agar growth medium as a control, and then place in an incubator.
- Run 60-second UVC cycle on that surface. Then, take a second swab and put it in separate petri dish within the incubator. Repeat for a 120-second cycle and a 240-second cycle.
- Repeat on each surface area you wish to test.
- Allow petri dishes to grow over a 48-hour period.
- A trained lab technician must then use a microscope to count the pathogens remaining in each petri dish.
- The reduction in count between the control sample and the other cycle sample is how reduction rate or "kill count" is calculated.

This is an expensive process that must be repeated for each isolated pathogen, but a methodical laboratory process is the only true way to measure how effective our equipment is in disinfecting the surfaces of your HMD.

Testing that doesn't work:

Customers have asked if they can utilize easier ways to test the product. The short answer is “No.” Any inexpensive, instant or quick-response tests will not accurately measure efficacy.

Protein Residue Testing

The Orion Clean Card Pro is a device you swab across a surface that quickly changes colors to indicate the presence of protein residue. Since protein residue is a growth medium for pathogens, the theory is that wherever there is a growth medium, there will also be pathogens. This is not accurate when using UVC light to eradicate pathogens. UVC light breaks the DNA of the pathogens, preventing them from breeding. An indication of protein residue is not a direct indicator of dangerous pathogens present.

Independent lab testing centers:

ResInnova Laboratories: 8807 Colesville Rd; Silver Spring, MD 20910; www.resinnovalabs.com

The MicroStar Lab: 130 Erick Street; Crystal Lake, IL 60014; www.microstarlab.com

Testing for dangerous pathogens requires certified laboratory techniques on high quality laboratory equipment, carefully controlled pathogens and applications, and expert technicians.



CLEANBOX

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