Best Practices for Sanitizing Electronic Devices

- Works for office equipment, and our more specialized AV equipment.
- Cleaning carefully with 70% isopropyl alcohol is the best solution to minimize risk to devices, while still providing an effective sanitizer.

Things to know

The number 1 thing to know before attempting to sanitize any electronic device is to understand the risks of the specific device:

1. Unplug or power down the device if *at all* possible, and let it sit for several seconds. Remove any cabling or accessories plugged into the device until the cleaning process is over. Assess the biggest risk factors on the device and avoid excessive moisture contact with these (Charging ports, USB ports, any air vent opening or speaker)
2. Be mindful of what chemical you are using for cleaning devices. Isopropyl alcohol mixed with *distilled* water in a 70-30 mixture is ideal. Do not use any harsh chemicals (Windex, Ammonia, or Bleach based cleaners), or any substance that can conduct electricity or have adverse interactions with plastics.
3. Limit the amount of moisture that makes contact with the device. Never spray the solution directly onto the device, always spray solution onto a cleaning cloth or similar intermediary.
4. **Isopropyl Alcohol is highly flammable in high concentrations, and both the liquid and evaporated fumes pose a risk. This is why it is so important to power down the device beforehand.**

Procedure:

1. Unplug and/or power down the device, if at all possible. Remove or unplug cabling and accessories.
2. Prepare your cleaning solution (70-30 Isopropyl alcohol and distilled water) by spraying onto a *lint-free* cloth, making the cloth *slightly* damp.
3. Gently wipe down only the surfaces of the device that need to be sanitized, do not press down hard (to avoid scratching or damaging the device). Focus on Keyboards, exterior surfaces of laptops, or any part of the device that is commonly touched. Avoid the screen, if at all possible.
4. Avoid allowing any liquid to spill into the device.
5. Allow the solution to completely dry before plugging the device in or powering back on.

Supplies:

Isopropyl alcohol is the best solution for cleaning electronic equipment. It is non-conductive, and thus nondestructive to electronic devices, and leaves very little harmful residue once it evaporates. At a concentration of 70% alcohol, mixed with distilled water, it should be an

effective disinfectant. (https://blog.gotopac.com/2017/05/15/why-is-70-isopropyl-alcohol-ipa-a-better-disinfectant-than-99-isopropanol-and-what-is-ipa-used-for/)

70% is also a *relatively* safe concentration, and mixed with 30% water will reduce the flammability risk of Isopropyl alcohol, for both usage and storage. Special attention needs to be paid to powering down devices, and even static discharge concerns (mainly for those mixing and handling large amounts) to avoid any risk of flame.

https://www.mcmaster.com/isopropyl-alcohol

There are a few options, either buying pre-packaged disposable wipes (2.5" x 1", 200 wipes is about $5) or by purchasing 99% Isopropyl ($45 a gallon) and mixing it ourselves with distilled water https://www.mcmaster.com/distilled-water ($5 a gallon). Then we can apply this solution to individual wipes: https://www.mcmaster.com/low-lint-wipes of our choosing.

The pre-made wipes are more sanitary, as they greatly reduce handling risk, storage risk, and can be thrown away afterward, but mixing the solution AND APPLYING IT TO WIPES allows us to better control the amount of moisture contacting the device, which is safer for the technology. As well as allowing one to control the wipe material and ensure it is as low-lint as possible, which while not a large factor, also helps protect the devices.