



Voluson Ultrasound Probe Cleaning and Disinfection Guide for Covid-19

Step-by-Step Guide for Disinfecting Your Probes

This content is extracted from your Voluson™ User Manual. Information on compatible cleaning products may be found on the last page.

Probes

Diagnostic ultrasound systems utilize ultrasound energy that must be coupled to the patient by direct physical contact. Depending on the type of examination, this contact occurs with a variety of tissues. The level of risk of infection varies greatly with the type of contact. One of the most effective ways to prevent transmission between patients is with single use or disposable devices. However, ultrasound transducers are complex and expensive devices that must be reused between patients. It is very important, therefore, to minimize the risk of disease transmission by using barriers.

Action	Daily	After/Before Each Use	As Necessary
Inspect the probes	---	X	X
Clean the probes	X	X	X
Disinfect endocavity probes	---	X	X
Disinfect all other probe types	---	X	X

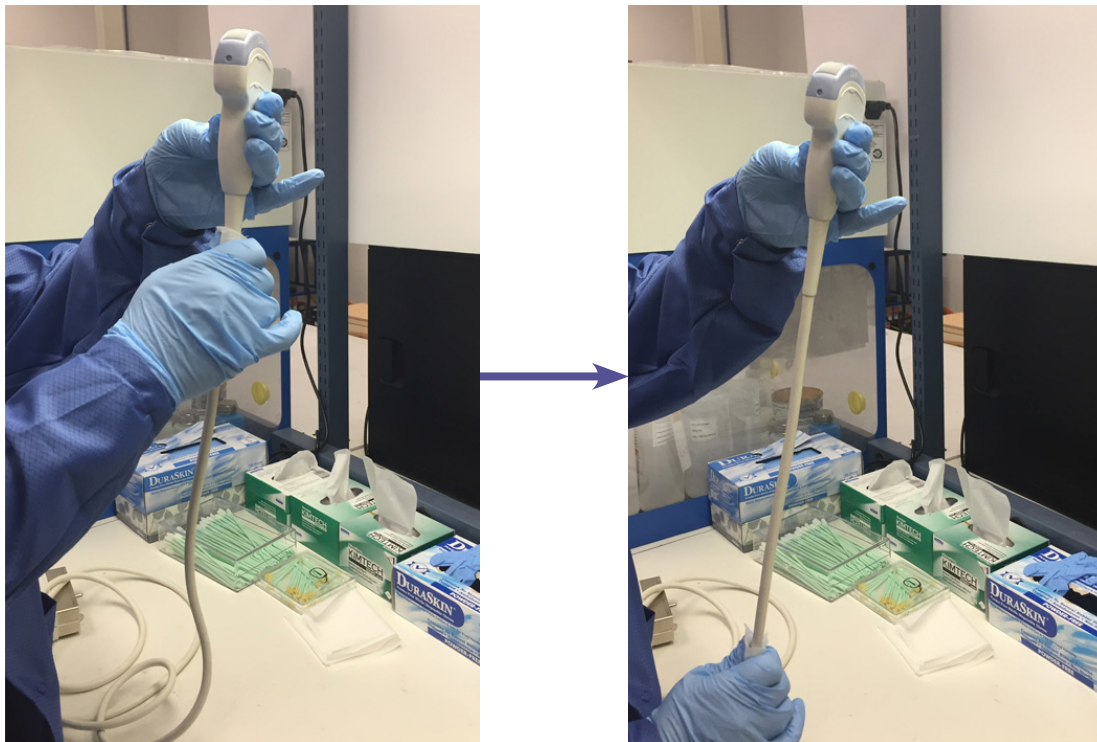
Warning/Caution:

- All probes that contact non-intact skin or mucous membranes (e.g. endocavitary, transesophageal) require High Level Disinfection. Handles of those probes that are not submerged during High Level Disinfection require Low or Intermediate Level Disinfection to avoid cross contamination
- After each use, inspect the lens, cable, and housing of the probe. Look for any damage that would allow liquid to enter the probe. If the probe is damaged, do not place it into any liquid (e.g. for disinfection) and do not use it until it has been inspected and repaired/replaced by a GE Service Representative
- DO NOT use a twisting motion or abrasive paper products when cleaning or wiping a GE Ultrasound probe. The use of abrasive wipes can damage the soft lens (acoustic window). To extend the life of the probe lens, pat dry only
- Use caution when cleaning the connector. This cable connector should only be cleaned with a slightly dampened cloth or wipe. Exposure to excessive moisture will result in damage to the probe and possibly the ultrasound console. DO NOT wet the connector/console interface surface or labels and ensure no liquid comes into contact with the probe connector pins or labels

Probe Pre-Treatment at the Point of Use and Cleaning with Wipes

The pre-treatment step is for removal of gel and gross contamination.

1. After each use, remove protective sheath from the probe and remove the coupling gel by wiping from the strain relief to the lens with a soft, low-lint cloth.
2. Wipe the cable with one of the wipes listed in the probe compatibility website from the strain relief to the connector. Wipe the cable with a low-lint cloth dampened with potable water to remove chemical residue. Dispose of the cloth, wipe and gloves in the clinical trash.
3. Clean the probe with wipes and hold the probe at the proximal end near the strain relief cable. DO NOT suspend or hold the probe by the cable as this may damage the probe.
4. Dispense a cleaning wipe from the wipe canister.
5. Gently wipe the probe with a cleaning wipe from the cable strain relief to the distal end. Pay special attention when wiping the probe's lens, edges and groves.
6. Turn the probe and continue wiping until the entire surface of the probe has been cleaned. As the wipe becomes visibly soiled, discard the wipe into clinical trash and dispense fresh wipes as needed.
7. Wrap a clean wipe around a soft nylon bristle brush to access crevasses, such as biopsy notches, on the surface of the probe.
8. Visually inspect the probe for any remaining soil and, if necessary, repeat steps 3 through 5 until the probe is visibly clean.
9. After each use, inspect the lens, cable, and housing of the probe. Look for any damage that would allow liquid to enter the probe.



Probe Intermediate-Level Disinfection

For Intermediate Level Disinfection of intact skin contacting probes, choose either the spray or wipe method.



Use of Spray or Wipes

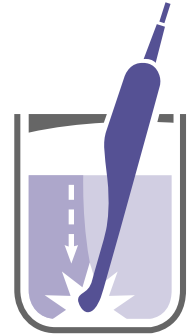
1. Put on a new pair of gloves and spray enough disinfectant solution to saturate a new disposable low-lint wipe or cloth.
2. Holding the probe near the strain relief, apply the dampened cloth/apply the wipe to the patient contacting lens. Wipe the probe from the lens to the strain relief, slightly rotating the probe after each wiping pass.
3. After the probe has been completely wiped, dampen a second wipe with disinfectant/use a second wipe and starting at the probe lens begin wiping the probe in a rotating motion moving down towards the strain relief. Spray disinfectant directly on the recessed areas and ridges to saturate/wring the wipe above recessed areas, seams, and ridges to drip disinfectant directly onto these less accessible surfaces.
4. Once the probe has been completely wiped, dampen a third wipe with disinfectant/use a third wipe and continue wiping the probe as needed to ensure the surface remains wet for the required exposure time. Use as many wipes as needed and respray disinfectant/drip additional disinfectant on recessed areas and ridges, to ensure all surfaces remain wet for the minimum required contact time listed in the disinfectant manufacturer's instructions for use.
5. Thoroughly dry all surfaces of the probe using a soft, low-lint wipe or cloth, changing wipes/cloths when necessary to ensure the probe is completely dry. Pat dry lens. Visually inspect the probe to ensure all surfaces are dry. Repeat drying steps if any moisture is visible.
6. If the probe is not immediately reused, store the probe in a manner that will protect and keep the probe from being recontaminated. This may be accomplished by placing the probe in a storage cabinet with filtered air flow and/or by using a disposable storage cover placed over the probe.

Probe High Level Disinfection

High Level Disinfection is required for devices that contact intact mucous membranes or nonintact skin. High Level Disinfection can be performed using either a disinfectant soaking method or an automated system such as [trophon® EPR](#) and [trophon2](#).

Use of Soak:

1. Ensure the probe has been disconnected from the console. Replace gloves and fill a sink or basin with High Level Disinfectant diluted in accordance with the disinfectant manufacturer's instructions to a level allowing immersion of the probe up to immersion line shown in the Instructions for Use.
2. Immerse probe in the disinfectant up to the immersion line shown in the Ultrasound console's user manual and ensure no air bubbles are trapped. Ensure the probe remains in the disinfectant for at least the minimum contact time listed in the disinfectant manufacturer's instructions for use (Ensure that the probe is suspended. The probe face should not be resting against the tank/basin surface and should be in full contact with the liquid. Carefully place the probe in the basin, taking care not to damage the transducer lens).
3. Thoroughly rinse the probe by immersing it in a large volume of critical (purified) water for a minimum of 1 (one) minute. Remove the probe and discard the rinse water. Do not reuse the water. Always use fresh volumes of water for each rinse. Repeat Step 3 two additional times, for a total of 3 (three) rinses (Failure to properly rinse probes with water following disinfection may cause skin irritation).
4. Thoroughly dry all surfaces of the probe using a soft, low-lint wipe or cloth, changing wipes' cloths when necessary to ensure the probe is completely dry. Pat dry lens. Visually inspect the probe to ensure all surfaces are clean and dry. Repeat drying steps if any moisture is visible.
5. If the probe is not immediately reused, store the probe in a manner that will protect and keep the probe from being recontaminated. This may be accomplished by placing the probe in a storage cabinet with filtered air flow and/or by using a disposable storage cover placed over the probe.



The instructions provided above have been validated to properly prepare GE Ultrasound probes for re-use. It remains the responsibility of the processor to ensure that the processing, as actually performed using equipment, materials and personnel in the processing facility, achieves the desired result. This requires verification and/or validation and routine monitoring of the process.

Use of trophon EPR and trophon2:

When performing High Level Disinfection of GE ultrasound probes with the trophon EPR and trophon2, it is not necessary to disconnect the probe from the ultrasound system. The probe must be inactive (not selected) during the disinfection cycle.

1. Upon completion of probe cleaning, ensure the probe has been thoroughly dried with a clean, low-lint soft cloth or wipe. Carefully dry the probe by wiping from the distal tip to the strain relief. Pat dry lens.
2. Visually inspect the probe to ensure the probe is visibly clean.
3. Follow the trophon instructions for probe placement and operation of the trophon system. Incorrect positioning of the probe may lead to High Level Disinfection not being achieved. (Damage to the probe may occur if the probe is placed in contact with the trophon chamber wall. Curved probes must be correctly positioned in the chamber using the Curved Probe Positioner (CPP) supplied with the trophon system.)
4. Once the trophon High Level Disinfection cycle is complete, don a new set of gloves and promptly remove the probe from the trophon machine. DO NOT allow the probe to remain in the machine for extended periods of time.
5. Hold the probe at the proximal end near the strain relief cable. DO NOT suspend or hold the probe by the cable, as this may damage the probe.
6. Wipe the probe from the distal end to the proximal end with a clean, low-lint, soft cloth or wipe to remove any residual hydrogen peroxide from the probe surface.
7. If the probe is not immediately reused, store the probe in a manner that will protect and keep the probe from being recontaminated. This may be accomplished by placing the probe in a storage cabinet with filtered air flow and/or by using a disposable storage cover placed over the probe.



CLEANING AND DISINFECTING RESOURCES

[Compatible Cleaners for your Voluson Ultrasound Probes](#) *(Click to View)*

[Probes Cleaning: Compatibility](#)

[Frequently Asked Questions on Cleaning and Disinfection](#)

[General Documentation Library/
User Manuals](#)

[Voluson Club COVID Resources](#)

[GE Healthcare Mobilising by Your Side](#)

[Other Resources](#) *(Click to View)*

[World Health Organization \(WHO\)
Coronavirus Resources](#)

[World Health Organization \(WHO\)
Decontamination and Reprocessing
of Medical Devices](#)

[Centers for Disease Control and Prevention \(CDC\)
Coronavirus Resources](#)

[Centers for Disease Control and Prevention \(CDC\)
Cleaning and Disinfection for Community Facilities](#)

[Centers for Disease Control and Prevention \(CDC\)
Guidance: Interim Infection Prevention and Control
Recommendations for Patients with
Suspected or Confirmed COVID-19](#)

[United States
Environmental Protection Agency \(EPA\)
List of Disinfectants for Use Against SARS-CoV-2](#)

[European Centre for Disease
Prevention and Control \(ECDC\)
COVID-19 Resources](#)

[Japan National Institute of Infection Disease \(NIID\)
Corona Resource](#)



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