

Cleaning and Disinfecting Transducers

General Cleaning

NOTE: This section describes cleaning and disinfecting procedures for all ZONARE transducers except the P8-3TEE transducer.

NOTE: Do not use any cleaner or disinfectant on the transducer pins.

External-use transducers (curved array, linear array, and phased array): ZONARE recommends cleaning the transducers using the **Wipe Method** after each patient exam. The use of a soft cloth thoroughly moistened with an approved disinfectant is recommended for cleaning the strain relief, transducer housing, cable, and connector.

Endocavity probes: ZONARE recommends performing the **Immersion Method** of disinfection after each patient exam. The use of a soft cloth thoroughly moistened with an approved disinfectant is recommended for cleaning the strain relief, transducer housing, cable and connector. Zonare also recommends the use of either a sterile or nonsterile transducer cover/sheath when endocavity probes are used.

NOTE: The transducers cannot be sterilized. When sterility is required, use a sterile transducer cover/sheath and sterile ultrasound/coupling transducer gel. Follow all manufacturer prescribed techniques.

IMPORTANT: To avoid cross-contamination of infectious disease, follow the manufacturer's instructions for use, disinfection, and/or sterilization of protective sheaths and reusable needle guides.

NOTE: If using CIVCO protective sheaths, go to www.civco.com/customer_support/customer_tools/ultrasound/Why_use_a_cover.pdf for information about infection control.

NOTE: If using CIVCO reusable endocavity needle guides, go to www.civco.com/customer_support/customer_tools/ultrasound/Why_use_a_guide.pdf for information about infection control.



WARNING: Prior to cleaning any device, turn off the system and unplug from AC power outlet to avoid electrical shock.

WARNING: Always examine transducers for damage, such as cracks, splitting, holes, or fluid leaks. If damage is evident, discontinue use of the transducer and contact ZONARE Technical Support.



WARNING: Always use protective eyewear and clothing when cleaning or disinfecting the transducers.

WARNING: Do not allow the disinfectant to come in contact with metal surfaces (transducer connector). Use a soft cloth and warm soapy water to remove any disinfectant that remains on metal surfaces.

CAUTION: When a brush is used for cleaning of transducers (in the case of the EV probe) use only a soft brush; coarse/stiff-bristle brushes may cause transducer damage.

Cleaning & Disinfecting

► Wipe Method

1. Disconnect the transducer from the **SmartCart** or **Scan Engine**. If present, remove the transducer cover/sheath and discard.
2. Use a soft cloth dampened with a mild soap (Liquinox) and water solution to remove particulate, ultrasound coupling gel, or body fluids.
3. Next, ZONARE recommends the use of a disinfectant solution to wipe the transducer housing, strain relief, cable, and connector. Follow the manufacturer's instructions for proper cleaning.

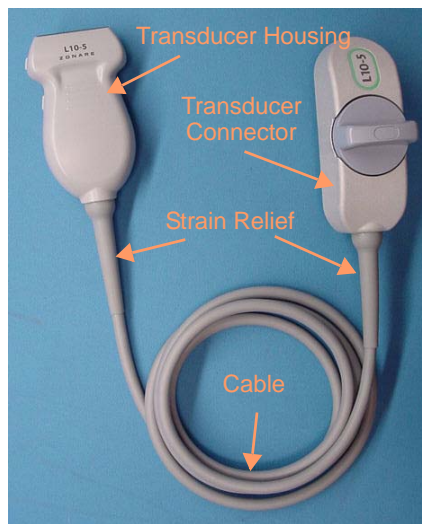


Figure 1. Transducer Housing, Connector, Strain Relief, and Cable

4. Air-dry (or towel dry) the transducer with a soft, clean cloth.
5. Examine the transducer for damage, such as cracks, splitting, holes, or fluid leaks. If damage is evident, discontinue use of the transducer and contact ZONARE Technical Support.

► Immersion Method

NOTE: All transducers may be immersed except AUX CW probes.

CAUTION: During immersion disinfection, never immerse the transducers longer than 45 minutes. Damage may occur to the transducer housing and/or components if disinfection times exceed these recommended limits.

CAUTION: Using a non-recommended cleaning or disinfectant solution, incorrect solution strength, or immersing the transducer deeper or longer than indicated can damage the transducer.

CAUTION: To prevent possible damage to the electronics of the transducer, never immerse the transducer beyond the point (10 mm below the top edge of the transducer housing) shown in [Figure 2](#).



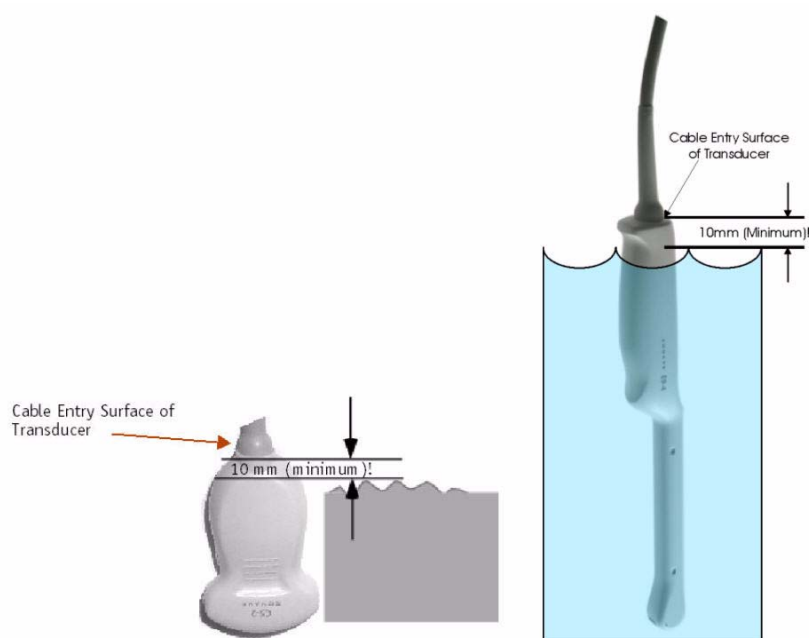


Figure 2. Immersion Level Limits

1. Disconnect the transducer from the **SmartCart** or **Scan Engine**. If present, remove the transducer cover/sheath and discard.
2. Use a soft cloth dampened with a mild soap (Liquinox) and water solution to remove particulate, ultrasound coupling gel, or body fluids.
3. Mix the disinfectant solution according to the manufacturer's instructions for solution strengths and disinfecting times.
4. Immerse the transducer into the disinfecting solution, ensuring it is not immersed below the depth indicated in [Figure 2](#). Immersion time should be as recommended by the disinfectant manufacturer.
5. Wipe the surface of the transducer with a soft cloth dampened with a mild soap (Liquinox) and water solution.
6. Wipe the transducer again with a soft cloth soaked with fresh water to remove any residual cleaning solution prior to use on patients.
7. Air-dry (or towel dry) the transducer with a soft, clean cloth.
8. Examine the transducer for damage, such as cracks, splitting, holes, or fluid leaks. If damage is evident, discontinue use of the transducer and contact ZONARE Technical Support.