

Cleaning and Disinfecting TEE Transducer

NOTE: Do not use any cleaner or disinfectant on the transducer pins. A dry lint-free cloth can be used to wipe the pins or a lint-free cloth slightly dampened with alcohol. Never press the pins with your finger as the oils in your fingers could interrupt contact.

ZONARE recommends cleaning the transducer 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, control housing, cable, and connector.

ZONARE recommends disinfecting the transducer using the **Immersion 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. ZONARE also recommends the use of either a sterile or nonsterile transducer cover/sheath when endocavity transducers 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 sheath manufacturer prescribed techniques.

WARNING: Before cleaning any device, turn off the system and disconnect power cord from AC power source 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 the transducer, use only a soft brush; coarse/stiff-bristle brushes may cause transducer damage.

Cleaning

► *Wipe Method*

1. Disconnect the transducer from the **SmartCart**. 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 strain relief, control handle, deflection wheel, push buttons, cable and transducer connector. Avoiding touching the internal pins with any cleaner. Follow the solution manufacturer's instructions for proper cleaning.

NOTE: A list of approved disinfecting solutions can be found later in this document

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.



NOTE: The multiplane TEE transducer is a precision instrument that must be handled with care. It may be damaged when dropped or abused. In particular, do not allow the distal transducer tip to come in contact with a sharp object. Do **not** touch the ultrasonic window in the tip unnecessarily. Never exert force onto the window.

WARNING: Keep the control handle and transducer connector out of any cleaning or disinfection solutions. The control handle and cable may be cleaned with a damp cloth, but only the distal end of the transducer up to the 100-cm marker on the shaft may be placed into a disinfection solution.

Disinfecting

▶ **Immersion Method**

CAUTION: During immersion disinfection, never immerse 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 nonrecommended cleaning or disinfectant solution, incorrect solution strength, or immersing the transducer deeper or longer than indicated can damage the transducer.

1. Follow the disinfectant manufacturer's recommendations for solution preparation, immersion time and rinsing.
2. Place the cleaned and dried transducer surface in contact with the disinfection solution. Take care that the flexible shaft is immersed up to no more than the 100-cm mark.

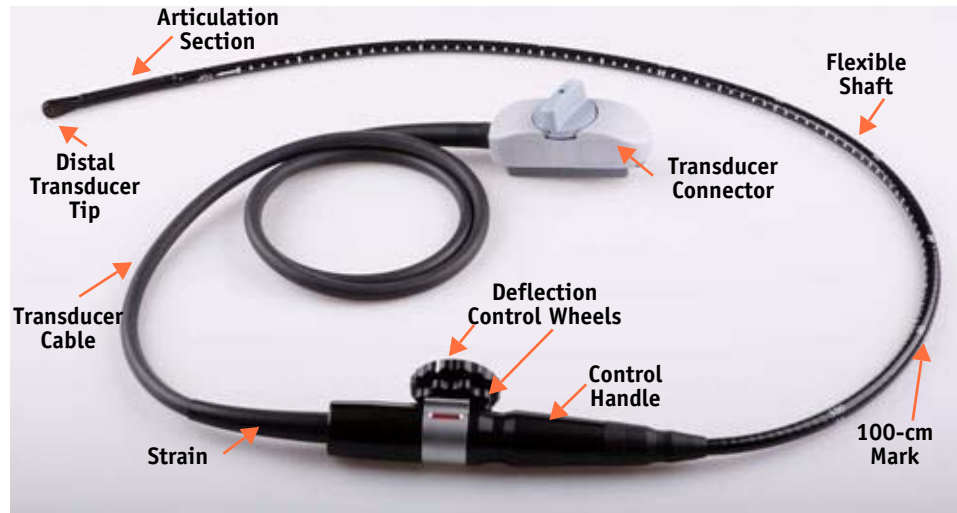


Figure 1. P8-3TEE Transducer

3. Rinse the transducer tip and shaft with water and dry prior to storage.



WARNING: Do not use other disinfection methods like iodine, steam, heat, or ethylene oxide.

WARNING: The use of a biteguard is mandatory. Failure to use the biteguard may result in damage to the transducer, which could result in a safety hazard. Damage to the transducer due to biting is not covered by the transducer's warranty.