INSTALLATION INSTRUCTIONS

Portable Survey Transducers

Models: B203, B217, B238, B249-A, B249-B, SS503

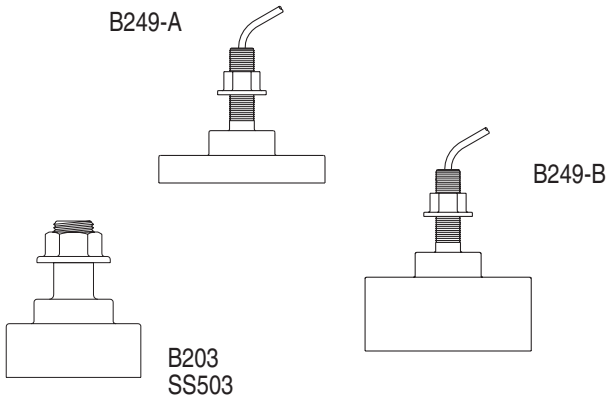
4/99

17-228-01 rev. 01

***IMPORTANT**: Please read the instructions completely before proceeding with the installation. These directions supersede any other instructions in your instrument manual if they differ.*

WARNING: NEVER USE SOLVENTS!

Certain cleaners, gasoline, paint, sealants and other products may contain strong solvents, such as acetone, which can attack many plastics dramatically reducing their strength.



Applications

- B203, B217, B249-A, and SS503 for shallow water surveying
- B238 and B249-B for shallow to mid-depth surveying
- Over-the-side mounting recommended

***Note**: If the transducer will be installed through the hull, mount in a fiberglass or wood hull only. Never mount a bronze housing in a metal hull because electrolytic corrosion will occur.*

Tools and Materials Needed

Silicone grease *or* petroleum jelly (Vaseline®)
Pipe coupling
Pipe with threads to match the pipe coupling
Pipe coupling adaptor:

B238, B249-A, B249-B	3/4" x 14 NPS threads
B203, B217, SS503	1/2" x 14 NPS threads

Lines *or* cables
Clamps

Mounting location

The transducer must be fully immersed in water and not subjected to air bubbles or turbulent water flowing across the radiating face.

Installation

***Caution**: Never pull, carry, or hold the transducer by the cable as this may sever internal connections.*

1. Apply silicone grease or petroleum jelly to the threads of the pipe to facilitate disassembly.
2. Twist the pipe coupling onto the pipe.
3. Push the transducer cable through the pipe.

   Alternately, after the transducer is attached, clamp the cable to the outside of the pipe using cable clamps.
4. Apply silicone grease *or* petroleum jelly to the transducer stem. Thread the transducer stem into the pipe coupling.

   Alternately, the transducer can be mounted to an adapter plate or fairing. Then the plate or fairing is bolted or clamped to the pipe.
5. Attach a line(s) or cable(s) to the pipe near the transducer that will support the pipe from the force of the water when the boat is underway.
6. Clamp the pipe to the gunnel.
7. Fasten the line(s) or cable(s) fore and aft with sufficient tension to support the pipe when the boat is underway.
8. Route the cable to the instrument being careful not to tear the cable jacket. To reduce electrical interference, separate the transducer cable from other electrical wiring. Coil any excess cable and secure it in place with zip-ties to prevent damage.
9. Refer to the survey recorder owner's manual to connect the transducer to the instrument.

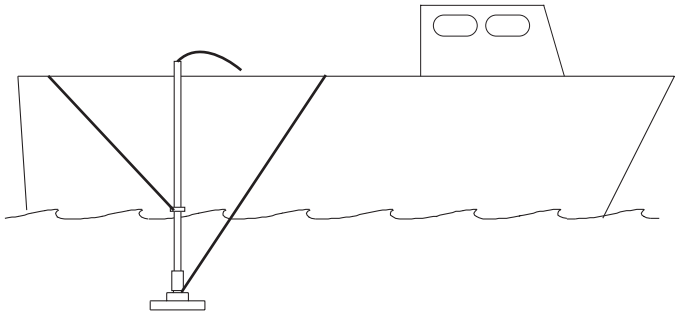


Figure 1. Over-the-side installation

Maintenance, Repair, and Replacement

Aquatic growth can accumulate rapidly on the transducer's surface reducing its performance in weeks. Clean the surface, keeping it free of marine growth and petroleum residue, with a soft cloth and mild household detergent.

Inspect the cable periodically for kinks, abrasions, and cuts. Repair any damage using Airmar's waterproof junction box 33-040. Inspect connectors and connections for indications of corrosion.

Antifouling Paint

Surfaces exposed to salt water *must* be coated with antifouling paint. Use **water-based** antifouling paint only. *Never* use ketone-based paint since ketones can attack many plastics damaging the transducer.

Transducer Replacement

The information needed to order a replacement Airmar sensor is printed on the **vinyl** tag affixed to the cable near the connector end. *Do not* abrade the marking or remove this tag. When ordering, specify the frequency, date code, and part number (see Figure 2).

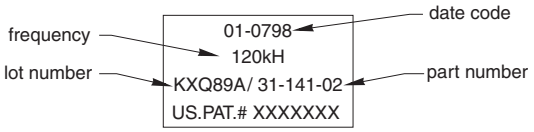


Figure 2. Sample vinyl tag

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