

# OWNER'S GUIDE & INSTALLATION INSTRUCTIONS

Surface Mount: *Analog*

## Temperature Sensor

Model: T80

Patent <http://www.airmar.com/patent.html>

07/24/18

17-584-01 rev. 02

**Follow the precautions below for optimal product performance and to reduce the risk of property damage, personal injury, and/or death.**

**WARNING:** Always wear safety glasses, a dust mask, and ear protection when installing.

**WARNING: Below the waterline mount**—When the boat is placed in the water, immediately check for leaks around the screws and any other holes drilled in the hull.

**CAUTION: Installation on a metal hull**—The stainless steel housing must be isolated from a metal hull to prevent electrolytic corrosion. Use marine sealant.

**CAUTION:** Never install a metal sensor on a vessel with a positive ground system.

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

## Tools & Materials

Safety glasses

Dust mask

Ear protection

Pencil

Electric drill

Drill bit/hole saw/spade bit:

Pilot holes 3mm or 1/8"

Transom hole (some installations) 18mm or 3/4"

2 Stainless steel, self-tapping screws 4 x 18mm or #8 x 3/4"

Marine sealant (suitable for below waterline)

Screwdriver(s)

Cable clamp(s) (some installations)

Grommet(s) (some installations)

Cable ties

Record the information found on the cable tag for future reference.

Part No. \_\_\_\_\_ Date \_\_\_\_\_



## Applications

- Measures air or water temperature.
- Stainless steel sensor is compatible with all hull materials. Recommended for aluminum hulls to prevent electrolytic corrosion, provided the stainless steel sensor is isolated from the metal hull by using marine sealant.

## Mounting Location

The sensor can be mounted anywhere that you want to know the temperature. For example, you can mount the sensor on the transom, in the live well, or in the engine compartment.

If you are measuring water temperature, choose a location where the sensor will be in contact with the water at all times.

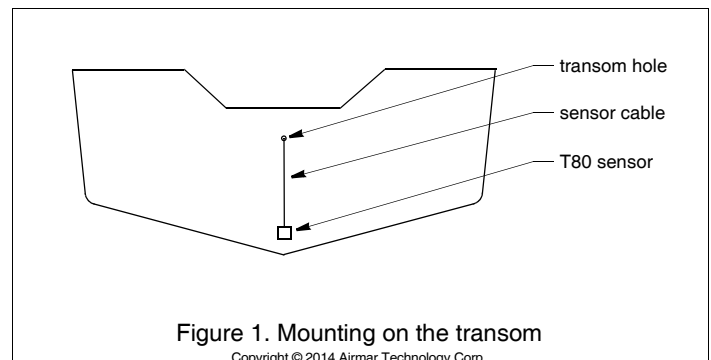
## Installation

### *Mounting on the transom*

**CAUTION:** Mount the sensor as close to the centerline (keel) of the boat as possible to ensure the sensor remains in the water when the boat is turning (Figure1).

**CAUTION: Fiberglass hull**—Minimize surface cracking by running the drill in reverse until the gelcoat is penetrated.

**CAUTION:** If the sensor came with a connector, do not remove it to ease cable routing. If the cable must be cut and spliced, use Airmar's splash-proof Junction Box No. 33-035 and follow the instructions provided. Removing the waterproof connector or cutting the cable, except when using a water-tight junction box, will void the sensor warranty.



Mount the sensor near the centerline and close to the bottom of the transom.

Route the sensor cable over the transom, through a drain hole, or through a hole that you have drilled in the transom **above the waterline**.

1. Place the sensor against the hull and mark the position of the screw holes with a pencil.
2. Using a 3mm or 1/8" drill bit, drill pilot holes at the marked locations, 10mm (3/8") deep.
3. Apply marine sealant to the threads of the purchased screws to prevent water from seeping into the transom.
4. Screw the temperature sensor to the hull.
5. If a hole must be drilled through the transom, choose a location **well above the waterline**. Check for obstructions such as trim tabs, pumps, or wiring inside the hull. Mark the location with a pencil. Drill a hole through the transom using the appropriate size hole saw or spade bit (to accommodate the connector). Do NOT remove the connector.
6. Route the cable over or through the transom.
7. On the outside of the hull, secure the cable against the transom using a purchased cable clamp(s). Mark the position of the screw hole(s) with a pencil.
8. Using a 3mm or 1/8" drill bit, drill a pilot hole(s) at the marked locations, 10mm (3/8") deep.
9. Apply marine sealant to the threads of the screw(s) to prevent water from seeping into the transom.
10. Fasten the cable clamp(s) in place.
11. If a hole has been drilled through the transom, apply marine sealant to the space around the cable leading through the transom.

## Cable Routing & Connecting

1. Route the cable to the instrument, being careful not to tear the cable jacket when passing it through the bulkhead(s) and other parts of the boat. Use grommet(s) to reduce chafing. To reduce electrical interference, separate the sensor cable from other electrical wiring and sources of noise. Coil any excess cable and secure it in place with cable ties to prevent damage.
2. Refer to the instrument owner's manual to connect the sensor to the instrument.

### *Replacement Sensor & Parts*

The information needed to order a replacement sensor is printed on the cable tag. Do not remove this tag. When ordering, specify the part number and date. For convenient reference, record this information at the top of page one.

Obtain parts from your instrument manufacturer or marine dealer.

#### Gemeco

#### USA

Tel: 803-693-0777

email: sales@gemeco.com

#### Airmar EMEA

#### Europe, Middle East, Africa

Tel: +33.(0)2.23.52.06.48

email: sales@airmar-emea.com



35 Meadowbrook Drive, Milford, New Hampshire 03055-4613, USA  
•www.airmar.com

