



# GT8HW-TM Transducer



## Installation Instructions

### Important Safety Information

#### **⚠ WARNING**

See the *Important Safety and Product Information* guide in the chartplotter or fishfinder product box for product warnings and other important information.

You are responsible for the safe and prudent operation of your vessel. Sonar is a tool that enhances your awareness of the water beneath your boat. It does not relieve you of the responsibility of observing the water around your boat as you navigate.

#### **⚠ CAUTION**

Failure to install and maintain this equipment in accordance with these instructions could result in damage or injury.

Always wear safety goggles, ear protection, and a dust mask when drilling, cutting, or sanding.

#### **NOTICE**

When drilling or cutting, always check what is on the opposite side of the surface.

To obtain the best performance and to avoid damage to your boat, you must install the Garmin® transducer according to these instructions.

Read all installation instructions before proceeding with the installation. If you experience difficulty during the installation, contact Garmin Product Support.

#### **Tools Needed**

- Drills and drill bits
- Number 2 Phillips screwdriver
- Masking tape
- Marine sealant

#### **Preparing the Transducer for Long-Term Exposure to Water**

#### **NOTICE**

Do not use acetone or acetone-based products on the transducer. Acetone damages the plastic transducer housing.

When you install a transducer on a boat that spends a significant amount of time in the water, you should coat the transducer and mounting hardware with a water-based anti-fouling paint to prevent marine growth.

- 1 Lightly sand the transducer and mounting hardware with a fine-grit abrasive pad.
- 2 Wipe the transducer and mounting hardware with isopropyl alcohol.
- 3 Apply water-based anti-fouling paint to the transducer and mounting hardware.

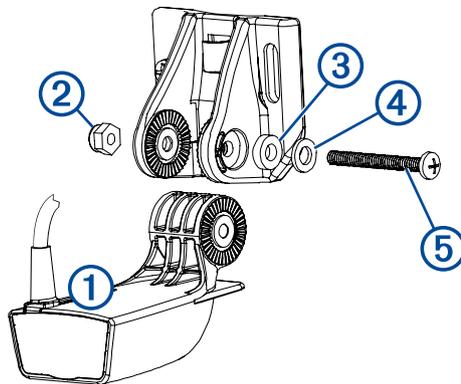
#### **Mounting Consideration**

To ensure peak performance with the lowest noise and interference, you should route the transducer cable away from ignition wires, house batteries and wires, trolling motor batteries and wires, and high-energy wires such as radar, audio amplifier, and autopilot pump wires.

#### **Assembling the Transducer**

Attach the transducer ① to the mount with the included lock nut ②, rubber washer ③, metal washer ④, and bolt ⑤.

**NOTE:** The bolt should be tight enough to hold the transducer in place when the boat moves at high speed, but loose enough to allow the transducer to pivot out of the way if the transducer hits an obstruction.



#### **Installing the Transducer on a Transom**

##### **Mounting Location Considerations**

- The transducer should be mounted as close to the center of the boat as possible.
- The transducer should not be mounted behind strakes, struts, fittings, water intake or discharge ports, or anything that creates air bubbles or causes the water to become turbulent. The transducer must be in clean (non-turbulent) water for optimal performance.
- The transducer should not be mounted in a location where it might be jarred when launching, hauling, or storing.
- On single-drive boats, the transducer must not be mounted in the path of the propeller. The transducer can cause cavitation that can degrade the performance of the boat and damage the propeller.
- On twin-drive boats, the transducer should be mounted between the drives, if possible.

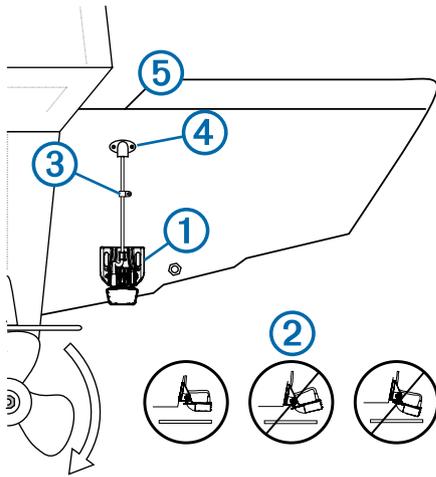
#### **Installing the Transom-Mount Hardware**

#### **NOTICE**

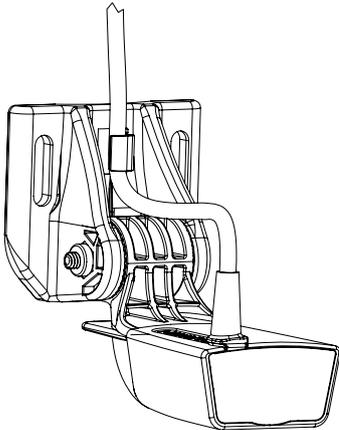
If you are mounting the bracket on fiberglass with screws, it is recommended to use a countersink bit to drill a clearance counterbore through only the top gel-coat layer. This will help to avoid any cracking in the gel-coat layer when the screws are tightened.

The cables connected to the transducer should not be cut, because cutting the transducer cables voids your warranty.

- 1 Position the transducer mount ① so the center of the bottom of the transducer is level with the bottom edge of the transom and is parallel to the water line.



- 2 Align the transducer parallel to the water line ②, and mark the center location of the two outer holes of the transducer mount.
- 3 Wrap a piece of tape around a 4 mm ( $\frac{5}{32}$  in.) bit at 18 mm ( $\frac{7}{10}$  in.) from the point of the bit, to avoid drilling the pilot holes too deep.
- 4 If you are installing the bracket on fiberglass, place a piece of tape over the pilot-hole location to reduce cracking of the gel coat.
- 5 Using the 4 mm ( $\frac{5}{32}$  in.) bit, drill the pilot holes approximately 18 mm ( $\frac{7}{10}$  in.) deep at the marked locations.
- 6 Apply marine sealant to the included 20 mm screws, and attach the transducer assembly to the transom.
- 7 Route the cable under the transom mount wire hook.



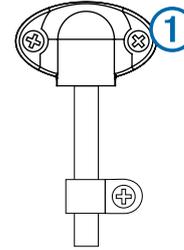
- 8 If you must route the cable through the transom, choose a pilot-hole location well above the waterline ③ and mark it.
- 9 Place a cable clamp on the transducer cable ④, approximately halfway between the transducer and the top of the transom or the pilot hole.
- 10 Mark the pilot-hole location for the cable clamp, and using a 3.2 mm ( $\frac{1}{8}$  in.) bit, drill a pilot hole approximately 10 mm ( $\frac{3}{8}$  in.) deep.
- 11 Apply marine sealant to the included 12 mm screw, and attach the cable clamp to the transom.
- 12 If you marked a pilot hole in step 8, choose the appropriate drill bit and drill a pass-through hole completely through the transom:
  - If you have the 4-pin cable, use a 16 mm ( $\frac{5}{8}$  in.) drill bit.
  - If you have the 8-pin cable or the 12-pin cable, use a 25 mm (1 in.) drill bit.
- 13 Route the transducer cable to the sounder:

- If you are routing the cable using a pass-through hole, push it through the hole you drilled in step 12, and install the cable-entry cover (*Installing the Cable-Entry Cover*, page 2).
  - If you are not routing the cable using a pass-through hole, route the cable up and over the top of the transom ⑤.
- You should avoid routing the cable close to electrical wires or other sources of electrical interference.

### Installing the Cable-Entry Cover

If you routed the cable through the transom after you installed the transducer, you should install the cable-entry cover to keep water from entering your boat.

- 1 Place the cable-entry cover ① over the hole and the cable, with the opening pointing downward, and mark the location of the two pilot holes.



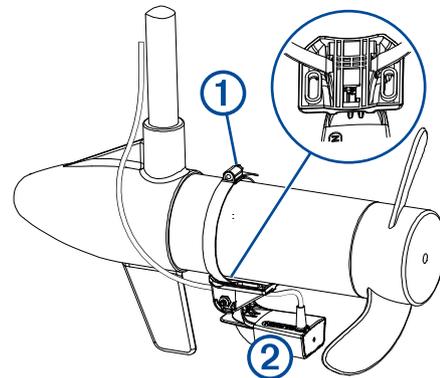
- 2 Remove the cable-entry cover, and, using a 3.2 mm ( $\frac{1}{8}$  in.) bit, drill the pilot holes approximately 10 mm ( $\frac{3}{8}$  in.) deep.
- 3 Fill the pass-through hole with marine sealant so it covers the cable completely and there is excess sealant around the hole and the cable.
- 4 Place the cable-entry cover over the hole and the cable, with the opening pointing downward.
- 5 Apply marine sealant to the included 12 mm M4 screws, and attach the cable-entry cover to the transom.
- 6 Wipe away all excess marine sealant.

### Installing the Transducer on a Trolling Motor

#### NOTICE

Do not cut the transducer cable. Cutting the transducer cable will void your warranty.

- 1 Insert the hose clamp ① through the slot on the transducer mount ②, until equal lengths extend on both sides of the mount.



- 2 Place the transducer mount against the body of the trolling motor with the narrow end of the transducer pointed away from the propeller.
- 3 Secure the hose clamp around the body of the trolling motor, and tighten the hose clamp.

- 4 Position the transducer so it is parallel to the bottom when in use.
- 5 Use the included cable ties to secure the transducer cable.
- 6 Route the transducer cable to the installation location of the sounder while taking these precautions.
  - The cable should not be routed close to electrical wires or other sources of electrical interference.
  - The cable must not be pinched when the trolling motor is deployed or stowed.

## Testing the Installation

### NOTICE

You should check your boat for leaks before you leave it in the water for an extended period of time.

Because water is necessary to carry the sonar signal, the transducer must be in the water to work properly. You cannot get a depth or distance reading when out of the water. When you place your boat in the water, check for leaks around any screw holes that were added below the water line.

## Testing the Transom-Mount Transducer Installation

### NOTICE

When adjusting the depth of the transducer, make the adjustments in small increments. Placing the transducer too deep can adversely affect the performance of the boat and put the transducer at risk of striking underwater objects.

Test the transom-mount transducer installation in open water free of obstacles. Pay attention to your surroundings as you test the transducer.

- 1 With the boat in the water, turn on the chartplotter.
- 2 Drive the boat at a slow speed. If the chartplotter appears to be working properly, gradually increase speed while observing the chartplotter.
- 3 If the sonar signal is suddenly lost or the bottom return is severely degraded, note the speed at which this occurs.
- 4 Return the boat to the speed at which the signal was lost, and make moderate turns in both directions while observing the chartplotter.
- 5 If the signal strength improves while turning, adjust the transducer so that it extends another  $\frac{1}{8}$  in. (3 mm) below the transom of the boat.
- 6 Repeat steps 2–4 until the degradation is eliminated.
- 7 If the signal does not improve, move the transducer to a different location on the transom, and repeat the test.

## Cleaning the Transducer

Aquatic fouling accumulates quickly and can reduce your device's performance.

- 1 Remove the fouling with a soft cloth and mild detergent.
- 2 If the fouling is severe, use a scouring pad or putty knife to remove growth.
- 3 Wipe the device dry.

## Software Update

You may need to update the device software when you install the device or add an accessory to the device.

### Loading the New Software on a Memory Card

You must copy the software update to a memory card using a computer that is running Windows® software.

**NOTE:** You can contact Garmin customer support to order a preloaded software update card if you do not have a computer with Windows software.

- 1 Insert a memory card into the card slot on the computer.

- 2 Go to [www.garmin.com/support/software/marine.html](http://www.garmin.com/support/software/marine.html).
- 3 Select **Download** next to the software bundle that corresponds with your device.
- 4 Read and agree to the terms.
- 5 Select **Download**.
- 6 If necessary, select **Run**.
- 7 If necessary, select the drive associated with the memory card, and select **Next > Finish**.

## Updating the Device Software

Before you can update the software, you must obtain a software-update memory card or load the latest software onto a memory card.

- 1 Turn on the chartplotter.
- 2 After the home screen appears, insert the memory card into the card slot.
 

**NOTE:** In order for the software update instructions to appear, the device must be fully booted before the card is inserted.
- 3 Follow the on-screen instructions.
- 4 Wait several minutes while the software update process completes.
- 5 When prompted, leave the memory card in place and restart the chartplotter manually.
- 6 Remove the memory card.
 

**NOTE:** If the memory card is removed before the device restarts fully, the software update is not complete.

## Registering Your Device

Help us better support you by completing our online registration today.

- Go to <http://my.garmin.com>.
- Keep the original sales receipt, or a photocopy, in a safe place.

## Contacting Garmin Product Support

- Go to [www.garmin.com/support](http://www.garmin.com/support) for in-country support information.
- In the USA, call 913-397-8200 or 1-800-800-1020.
- In the UK, call 0808 238 0000.
- In Europe, call +44 (0) 870 850 1241.

## Specifications

Specification	Measurement
Transmit power	250 W (RMS)
Maximum depth*	244 m (800 ft.)
Frequencies**	From 145 to 240 kHz
Operating temperature range	From 0° to 40°C (from 32° to 158°F)

\*Dependent upon the water conditions.

\*\*Dependent upon the chartplotter or fishfinder model.

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