

THANK You

Thank you for choosing Humminbird, America's #1 name in depthsounders. Humminbird has built its reputation by manufacturing top-quality, thoroughly reliable marine equipment. Genuine Humminbird accessories offer the opportunity to upgrade and expand the capabilities of your Humminbird product.

Note: Please be aware that the transducer design has changed. The new transducer now uses a plastic mounting bracket and will not fit on a metal mounting bracket. If you are replacing or adding mounting hardware to your current transducer, make sure that you have selected the appropriate hardware. If you are replacing a transducer, you will need to replace the mounting bracket and hardware also. For additional information, contact the Customer Resource Center through the Product Support section of www.humminbird.com, or call 334-687-0503.

ABOUT TRANSOM MOUNT INSTALLATION

Note: If you have a High Speed Transducer with integral temperature sensor (-T), it is not designed for In-hull mounting. Options include a separate temperature sensor or possibly an In-hull Puck Transducer with temperature probe pigtail. Information and guidance is available from our Customer Resource Center at www.humminbird.com or at 334-687-0503.

There are several ways to install a transducer on your boat. The transom mounted installation provides the least loss of signal, since the transducer is mounted outside the boat hull. This installation also allows you to adjust both running angle and depth after the transducer is mounted, enabling you to tune the installation for best results. The mounting hardware is designed to pivot the transducer body out of the way should the boat strike debris in the water, or when the boat is out of the water. All necessary hardware is included for this type of installation (see Figure 1).

BEFORE YOU START

Following are instructions for the installation of the High Speed Transducer.

We encourage you to read these instructions carefully to get full benefit from your Humminbird accessory. If you find that any items are missing from your installation kit, contact our Customer Resource Center.

LOCATING THE TRANSDUCER

In addition to the hardware supplied with your transducer, you will need a powered hand drill and various drill bits, Phillips and flat head screwdrivers, a ruler or measuring tape, pen or pencil, and marine-grade silicone sealant.

First, determine the best location on the transom to install the transducer. Consider the following to find the best location:

- It is very important to locate the transducer in an area which is relatively free of turbulent water. (See Figure 2) As a boat moves through the water, turbulence is generated by the weight of the boat, and the thrust of the propeller(s) - either clockwise or counter-clockwise. This turbulent water is normally confined to areas immediately aft of ribs, strakes or rows of rivets on the bottom of the boat, and in the immediate area of the propeller(s) (Figure 2). Clockwise propellers create more turbulence on the port side. On outboard or inboard/outboard boats, it is best to locate the transducer at least 15" (380 mm) to the side of the propeller(s).

- The best way to locate turbulence-free water is to view the transom while the boat is moving. This method is recommended if maximum high-speed operation is a high priority. If this is not possible, select a location on the transom where the hull forward of this location is smooth, flat and free of protrusions or ribs.
- The hydrodynamic shape of your transducer allows it to point straight down without deadrise adjustment. (Figure 3)
- On boats with stepped hulls, it may be possible to mount the transducer on the step. Do not mount the transducer on the transom behind a step to avoid popping the transducer out of the water at higher speeds; the transducer must remain in the water for the Control Head to maintain the sonar signal. (Figure 4).
- If the transom is behind the propeller(s), it may be impossible to find an area clear from turbulence, and a different mounting technique or transducer type should be considered, such as an Inside the Hull Transducer.

MOUNTING THE BRACKET

1. Remove the correct transducer mounting template from this

sheet. Match the mounting bracket screw slots to the template screw slots to make sure you have selected the correct template for your transducer mounting bracket type.

Note: Please make sure that you have selected the correct template for your transducer mounting bracket type, and that you use the correct drill holes for the hull composition of your boat.

2. Hold the template on the transom of the boat in the location where the transducer will be installed (Figure 15). Align the template vertically, matching the lower edge of the transom with the bottom corner of the template. If your propeller moves clockwise as the boat moves forward, mount the transducer on the starboard side, and use the bottom left corner of the template. If your propeller moves counter-clockwise as the boat moves

Transom Mounted Transducer

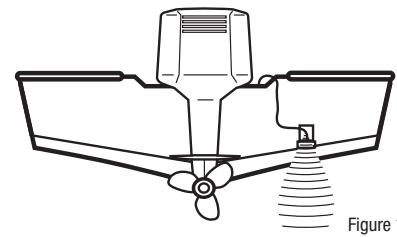


Figure 1

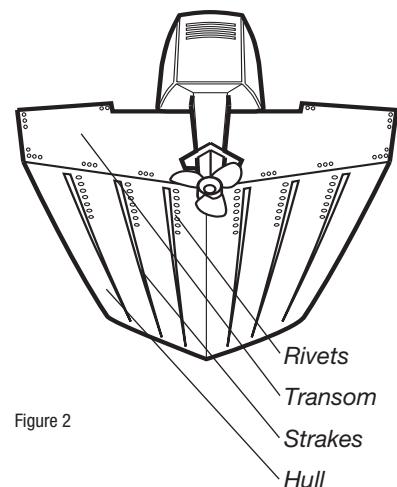


Figure 2

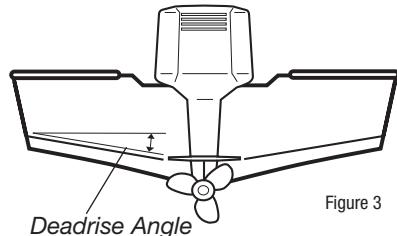
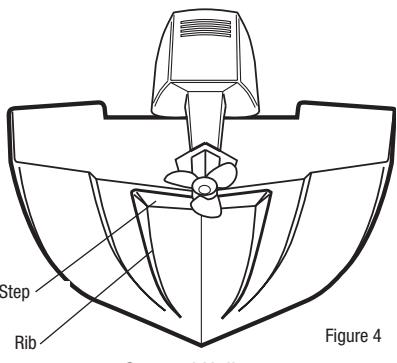


Figure 3



Stepped Hull

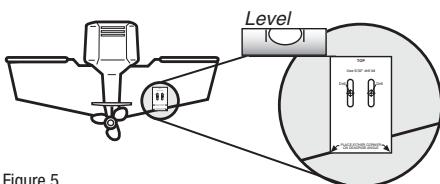
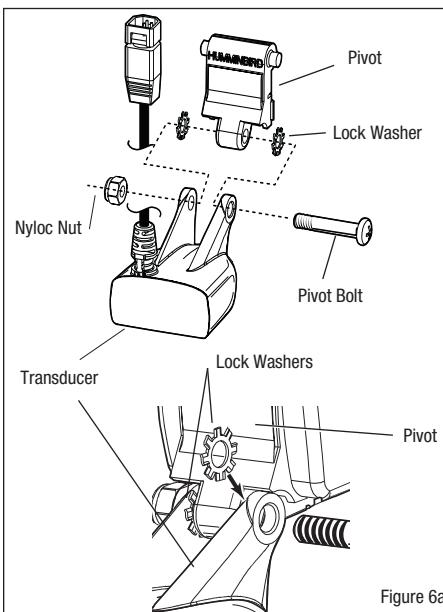
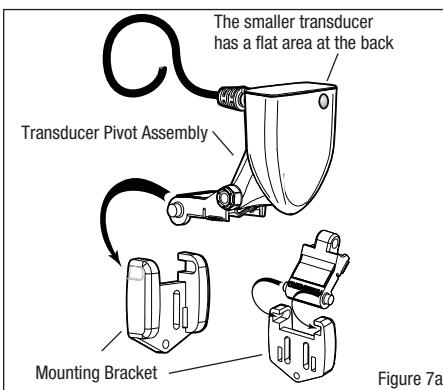


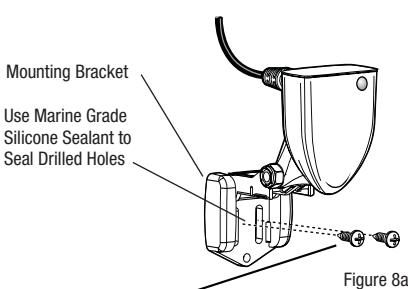
Figure 5
Angle should be 0° (level)
from port to starboard



Attaching the Small Transducer to the Pivot



Attaching the Small Transducer Assembly
to the Bracket



Small Transducer

forward, mount the transducer on the port side, and use the bottom right corner of the template.

- Using a pencil or punch, mark the two mounting holes (shown on the template for your type of hull) on the transom. Do not mark or drill any other holes at this time.

DRILLING THE MOUNTING HOLES

- On fiberglass hulls, it is best to start with a smaller bit and use progressively larger drill bits to reduce the chance of chipping or flaking the outer coating. Using a $\frac{3}{64}$ " (3.5 mm) bit, drill the two holes to a depth of approximately 1" (25 mm).

ASSEMBLING THE TRANSDUCER

- Attach the Pivot to the transducer body, as shown in Figure 6a or 6b, depending on your transducer type, using the #8 - $\frac{3}{8}$ " (9 mm) long Phillips headed pivot screw, nyloc nut, and the two toothed lock washers OR the #8 - $\frac{3}{8}$ " (9 mm) long Allen headed pivot screw, headed pin, two flat washers, and the two toothed lock washers. The toothed lock washers must be positioned between the transducer pivot ears and the bracket pivot tongue.
- Using the appropriate tools, loosely tighten the pivot screw. Do not completely tighten the assembly at this time, so that the pivot angle can be adjusted later.
- Insert the pivot/transducer assembly into the mounting bracket, as shown. Do not snap the assembly closed. (See Figures 7a and 7b.)

MOUNTING THE TRANSDUCER

- Use a marine-grade silicone sealant to fill the drilled holes, especially if the holes penetrated the transom wall. (See Figures 8a and 8b.)
- Align the transducer assembly with the drilled holes in the transom.
- With either a flat head screwdriver, a $\frac{5}{16}$ " (8 mm) hex driver, a $\frac{1}{16}$ " (8 mm) socket, or a Phillips head screwdriver, mount the assembly to the transom using the two #10 - 1" (25 mm) long hex head screws or two #8 - $\frac{3}{8}$ " Phillips wood screws (provided). (See Figures 8a and 8b.)
- Do not fully tighten the mounting screws at this time, to allow vertical adjustment of the transducer. Snap the pivot down into place.

RUNNING POSITION ADJUSTMENT

The running position of the transducer is now completely adjustable. The bracket allows height and tilt adjustment, the pivot screws allow angular adjustment. Correct transducer height and running angle settings are needed to ensure best performance at all boat speeds. Initially, adjust the transducer as described in the following paragraphs. Further adjustment may be necessary to tweak the installation after high speed testing.

- Cut out the correct transducer template for your transducer type from this sheet, following the cutting directions on the template for your type of boat hull (aluminum or fiberglass). Adjust the height on the transom and the pivot bolt angle to match guides on the template as shown.
- Hand tighten the pivot bolt and mounting screws at this time. Make sure that the height and angle have not changed.

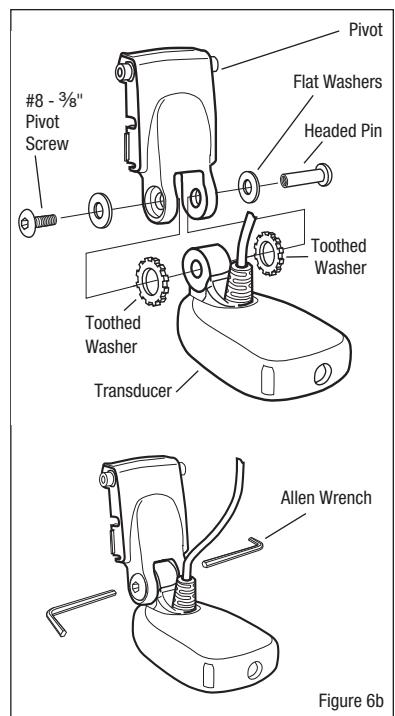


Figure 6b
Attaching the Large (XT Series)
Transducer to the Pivot

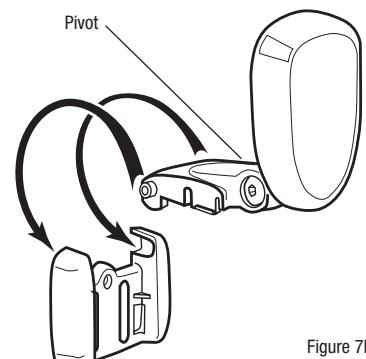


Figure 7b
Attaching the Large Transducer
Assembly to the Bracket

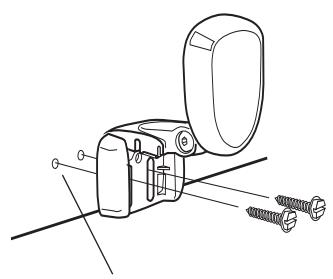


Figure 8b
Use Marine Grade
Silicone Sealant to
Seal Drilled Holes

Figure 8b

Large Transducer

3. Force the pivot to the Up position to gain access to the mounting screws.
4. Make sure that the transducer location has not changed, then fully tighten the two mounting screws (Figure 8a or 8b). Snap the pivot back down.
5. Confirm that the pivot angle has not changed.

ROUTING THE CABLE

The transducer cable has a low profile connector that must be routed to the

point where the depthsounder will be mounted. Every boat is different and there may be several ways to route the cable. See Routing the Cable for instructions.

CAUTION! Do not cut or shorten the transducer cable, and try not to damage the cable insulation. Route the cable as far as possible from any VHF radio antenna cables or tachometer cables to reduce the possibility of interference. If the cable is too short, extension cables are available to extend the transducer cable up to a total of 50' (15 m). For assistance, contact the Customer Resource Center at www.humminbird.com or call 334-687-0503 for more information.

There is often a channel or conduit, used for other wiring, on the inside of the boat, that you can use to route the transducer cable.

1. If you choose to pass the cable through the transom of the boat, a $\frac{5}{8}$ " (16 mm) hole must be drilled above the waterline. Fill this hole with marine-grade silicone sealant, and use the supplied escutcheon plate to dress the entry hole. This will require two #8 x $\frac{5}{8}$ " (16 mm) screws provided and drilled holes of $\frac{3}{16}$ " (3.5 mm). (See Figure 9.)
2. Remember that the transducer can pivot up to 90 degrees in the bracket. Allow sufficient cable slack for this movement. It is best to route the cable to the side of the transducer so that the cable will not be damaged by the transducer during rotation. Cable clamps are provided to secure the cable to the transom using the same type of screws as the escutcheon plate.

CONNECTING THE CABLE TO THE CONTROL HEAD

1. Insert the transducer cable into the appropriate terminal slot. The cable connectors are labeled, and there are

corresponding labels on the cable holder on the rear of the Control Head. The slots are keyed to prevent reversed installation, so be careful not to force the connector into the holder.

2. Refer to your Control Head Installation Guide for the correct procedure for installing the cable connectors to the Humminbird Control Head.

INSTALLATION TESTING

Testing should be performed with the boat in the water, although you

can initially confirm basic operation while the boat is out of the water.

1. Press POWER once to turn the Control Head on. There will be an audible chirp when the button is pressed correctly. If the unit does not power-up, make sure that the collector plug is fully seated in the receptacle and that power is available.
2. If all connections are correct and power is available, the Control Head will enter Normal operation.

Note: The transducer must be submerged in water for reliable transducer detection.

3. If the bottom is visible on-screen with a digital depth readout, the unit is working properly. Make sure that the boat is in water greater than 2' (.6 m) but less than the depth capability of the unit, and that the transducer is fully submerged, since the sonar signal cannot pass through air.
4. If the unit is working properly, gradually increase the boat speed to test high-speed performance. If the unit functions well at low speeds but begins to skip or miss the bottom at higher speeds, the transducer requires adjustment.
5. If you have the correct angle set on the transducer, yet lose a bottom reading at high speed, adjust the transducer to a lower depth in the water. If you reach the top of the screw slots and continue to lack high speed performance, increase the angle of the transducer by lowering the back of the transducer in increments of $\frac{1}{8}$ " (4 mm); see Figure 10.

Note: It is often necessary to make several incremental transducer adjustments before optimum high speed performance is achieved.

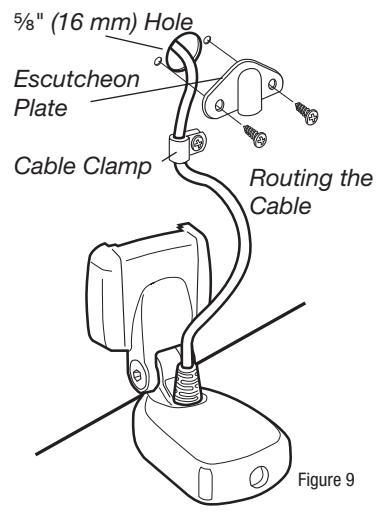


Figure 9
Mounting the Transducer to the Transom

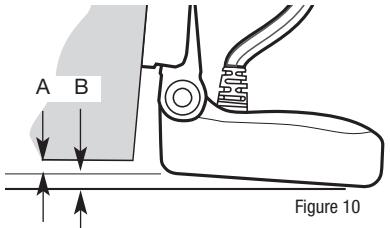


Figure 10

A = $\frac{1}{8}$ " - $\frac{1}{4}$ " (3 - 6 mm) Fiberglass Hulls
 $\frac{1}{4}$ " - $\frac{1}{2}$ " (6 - 13 mm) Aluminum Hulls
B = $\frac{1}{4}$ " (6 mm)

Adjusting the Running Position

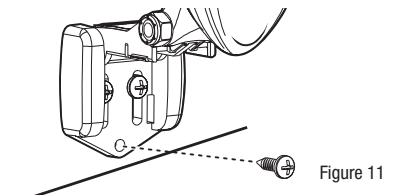
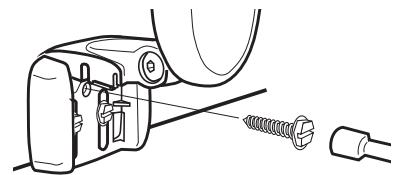
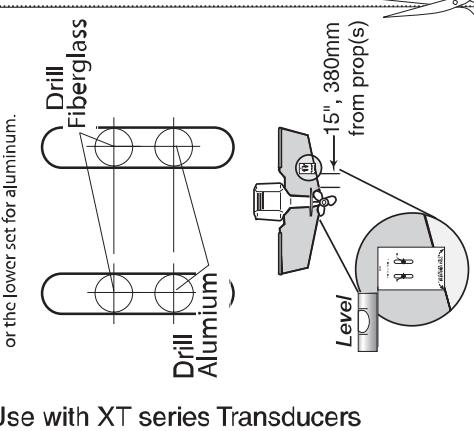
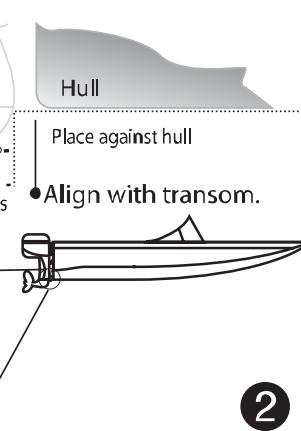
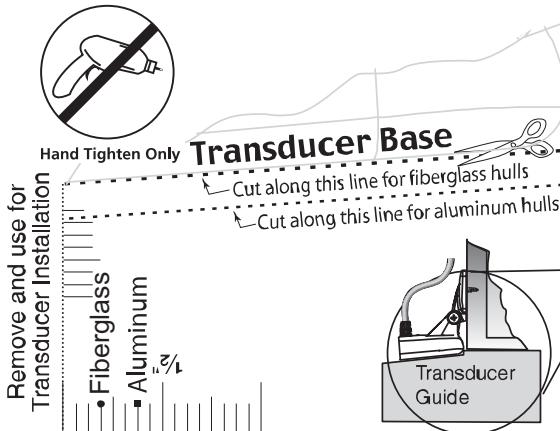


Figure 11

Installing the Third Mounting Screw



PLACE EITHER CORNER
ON DEADRISE

Use with XT series Transducers

Important: For Transom Mount transducer installations, install the third mounting screw after the final transducer adjustments. Hand tighten only (see Figure 11).

Your depthsounder is now ready for operation.

Note: If your depthsounder is temperature-capable, your transducer includes a temperature probe. When your transducer is hooked up, the temperature probe will allow your depthsounder to display water temperature automatically.

This accessory works with a number of Humminbird depthsounder products. Some products may require disassembly of the depthsounder mounting bracket in order to connect the cable. Refer to the operation manual for your depthsounder.

MAINTENANCE

If your boat remains in the water for long periods of time, algae and other marine growth can reduce the effectiveness of the transducer. Periodically clean the face of the transducer with a biodegradable detergent or hot water.

WARNING! Do not touch an active transducer during operation, as this may cause physical discomfort and may result in personal injury in the form of tissue damage. Handle the transducer only when the power to the depthsounder is off.

Pivoting the transducer up in the bracket may allow better access for inspection or cleaning. During cleaning, your boat should not be running, and this procedure is normally performed while the boat is out of the water.

In some cases it may take some time to wet the transducer when returned to the water. Small air bubbles can cling to the surface of the transducer and interfere with proper operation. These bubbles will dissipate with time, or you may wipe the face of the transducer with your fingers after the transducer is in the water.

CUSTOMER RESOURCE CENTER

Your Humminbird accessory is designed for trouble-free operation and is backed by the same warranty as our depthsounders, VHF marine-band radios, and GPS navigation equipment. Refer to your Humminbird Warranty

Card for the specific details of this warranty. If you have any questions, visit our web site at www.humminbird.com, select the Product Support tab/link or call our Humminbird Customer Resource Center:

334-687-0503

Throughout the U.S. and Canada, hours are: Monday-Friday,

8:00 a.m. to 4:30 p.m. Central time

**Humminbird
108 Maple Lane
Eufaula, AL 36027**

WARNING: Avoid contact or close proximity with the transducer during operation of your fishfinder. Touching any transducer during operation can cause discomfort and may lead to personal injury. Handle the transducer only when the power of the fishfinder is off.

WARNING: Disassembly and repair of this electronic unit should only be performed by authorized service personnel. Any modification of the serial number or attempt to repair the original equipment or accessories by unauthorized individuals will void the warranty. Handling and/or opening this unit may result in exposure to lead, in the form of solder.

WARNING: This product contains lead, a chemical known to the State of California to cause cancer and birth defects and other reproductive harm.

