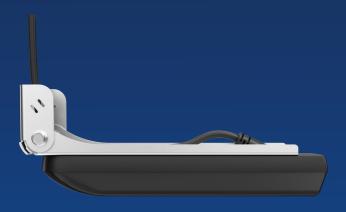
## **LOWRANCE**°

# Active Imaging™ HD (Transom)

Installation Manual English





## **Preface**

## **Sonar performance**

▲ Warning: It is your sole responsibility to install and use the instrument and transducer(s) in a manner that will not cause accidents, personal injury or property damage. Always observe safe boating practices.

The accuracy of the sonar depth display can be affected by many factors, including the type and location of the transducer and water conditions. Never use this instrument to gauge depth or other conditions for swimming or diving.

The choice, location, and installation of transducers and other components of the system are critical to the performance of the system as intended. If in doubt, consult your Navico dealer.

To reduce the risk of misusing or misinterpreting this instrument, you must read and understand all aspects of the Installation and Operation manuals. We also recommend that you practice all operations using the built-in simulator before using this instrument on the water.

▲ Warning: Navico is not responsible for any changes or modifications not expressly approved by the party responsible for compliance. Such modifications could void the user's authority to operate the equipment.

### **Disclaimer**

As Navico is continuously improving this product, we retain the right to make changes to the product at any time which may not be reflected in this version of the manual. Please contact your nearest distributor if you require any further assistance.

It is the owner's sole responsibility to install and use the equipment in a manner that will not cause accidents, personal injury or property damage. The user of this product is solely responsible for observing maritime safety practices.

NAVICO HOLDING AS AND ITS SUBSIDIARIES, BRANCHES AND AFFILIATES DISCLAIM ALL LIABILITY FOR ANY USE OF THIS PRODUCT

IN A WAY THAT MAY CAUSE ACCIDENTS, DAMAGE OR THAT MAY VIOLATE THE LAW.

This manual represents the product as at the time of printing. Navico Holding AS and its subsidiaries, branches and affiliates reserve the right to make changes to specifications without notice.

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## **Compliance statements**

## **Europe**

Navico declares under our sole responsibility that the product conforms with the requirements of:

CF under FMC Directive 2014/30/FU

The relevant declarations of conformity are available in the product's section at:

www.lowrance.com

## **United Kingdom**

Navico declares under our sole responsibility that the product conforms with the requirements of:

UKCA under the Electromagnetic Compatibility Regulations 2016.

The relevant declarations of conformity are available in the product's section at:

www.lowrance.com

#### **United States of America**

▲ Warning: The user is cautioned that any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

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Navico declares under our sole responsibility that the product conforms with the requirements of:

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- DownScan Imaging™ is a trademark of Navico Holding AS.
- DownScan Overlay® is a trademark of Navico Holding AS.
- FishReveal™ is a trademark of Navico Holding AS.
- King StarBoard® is a trademark of King Plastic Corporation.
- Lowrance® is a trademark of Navico Holding AS.
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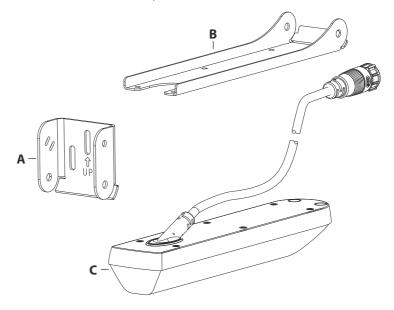
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## **Parts included**

The transom mounting bracket assembly parts and a hardware mounting kit are included with the transducers. The transducer has a cable attached with a 9 pin connector.



- A Transom mount plate
- **B** Transducer bracket mount plate
- **C** Transducer with cable attached

Hardware mounting kit (included)			
Omm	Transom mount screws #10x1-1/4" (3)		
0	#10 flat washers for transom mount screws (3)		
	Bracket assembly bolt, M6 flanged head (2)		
	Bracket assembly flanged nut M6 (2)		

Hardware mounting kit (included)			
<b>&amp;</b>	Transducer attachment screws M4 (6)		
	Transducer attachment lock washers M4 (6)		
	Cable ties (2), used to secure the cable as needed		

Required tools and supplies (not included)
Drill
3 mm (1/8") Drill bit

Marine high-grade below-waterline sealant/adhesive compound

Two 10 mm wrenches

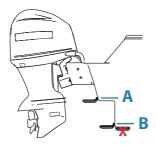
Phillips (cross-head) screwdriver

## **Mounting options**

→ **Note:** Always wear appropriate eyewear, ear protection and dust mask when drilling, cutting, or sanding. Remember to check the reverse side of all surfaces whenever drilling or cutting.

Use the following table to determine which mounting option is best suited to your boat/installation preferences.

- → **Note:** When installing, keep the transducer on the protective foam nest where the transducer is placed from factory.
- → **Note:** Before drilling any holes, ensure that holes are drilled in a safe position. Ensure you do not drill into tanks, reservoirs, hoses, or cables, etc. and that the holes will not weaken the structure in any way.
- → **Note:** When mounting the transducer, make sure there is nothing around the mounting location that could interfere with its sonar beams.
- → **Note:** If mounting where the transducer comes out of the water, for example when the boat is on plane, the sonar will not work while the transducer is out of the water.



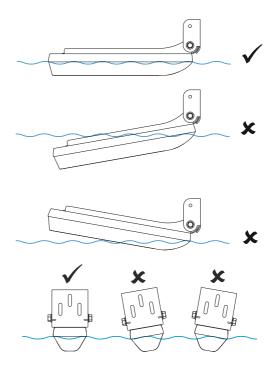
**A** Step mount (Transom bracket)

- **B** Transom mount (Transom bracket)
  - → Note: Do not mount the transducer under the hull or so that it hangs down under the hull. The transducer is better protected when mounted above the bottom of the hull. There is less chance of damage from obstructions in the water, or when trailering and launching the boat.

Transducer mounting options			
Transom mount (Transom bracket) Refer to "Transom bracket assembly" on page 13.	<ul> <li>Keeps transducer in the water when the boat is on plane, allowing you to track bottom at high speeds.</li> <li>Transducer angle can be adjusted so it is parallel with the water.</li> <li>Transducer more likely to collide with obstructions in the water and adds drag to the boat.</li> </ul>		
Step mount (Transom bracket) Refer to "Step mount using the transom bracket" on page 15.	<ul> <li>Transducer is not in the water when boat is on plane; protects transducer and prevents drag from transducer.</li> <li>Transducer angle can be adjusted so it is parallel with the water.</li> <li>Sonar does not track bottom when transducer comes out of the water.</li> </ul>		

## **Transducer angle**

After mounting the transducer, make sure the transducer is adjusted so it will be parallel with the waterline in both the horizontal and vertical axis when moving at trolling speed.



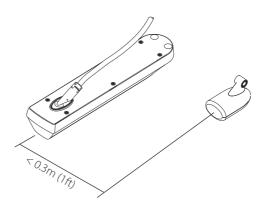
## DownScan Overlay and SideScan FishReveal

→ **Note:** Only required for Active Imaging HD 2-in-1 transducers.

The transducer should be installed within approximately 0.3 m (1 ft) of the broadband sounder transducer to get optimum performance from the DownScan Overlay feature. This feature's performance could be degraded if the transducer is too far away from the broadband sounder transducer.

→ **Note:** The Active Imaging HD 3-in-1 transducers include a broadband sounder. As a result, the DownScan Overlay and

SideScan FishReveal (supporting transducers) broadband images work perfectly every time since the images come from the same place.

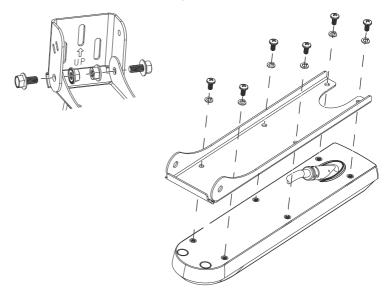


## Transom and step mount (Transom bracket)

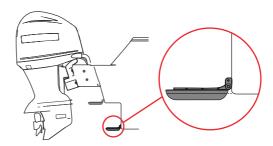
The transducer can be mounted to the transom or step with the transom bracket. With these mounting options the transducer can be in the water when you are on plane, or can be mounted so it is only in the water when you are moving at trolling speed.

Transom mount (aluminum	hull) supplies (not included)	
M5 Machine Screws (3)	Marine high-grade below- waterline sealant/adhesive compound.	
Plastic isolating material such as King StarBoard® (prevents corrosion between bracket and aluminum hull).		

## **Transom bracket assembly**



#### **Transom mount**



The transducer can be mounted on a transom bracket. With this mounting option the transducer can be in the water when you are on plane, or can be mounted so it is only in the water when you are moving at trolling speed.

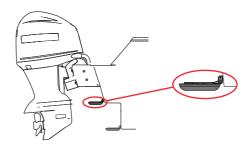
- → *Note:* Sonar does not track bottom when the transducer is out of the water.
- **1.** Attach the transducer to the bracket mount plate using the 6 M4 attachment screws and M4 lock washers.

- **2.** Loosely attach the transducer bracket mount plate to the transom mount plate using M6 screws and nuts.
- **3.** Choose a transducer location.
- → **Note:** If the transducer is not placed in a smooth flow of water, interference caused by bubbles and turbulence may cause loss of the bottom and digital depth on the MFD.
- **4.** Place the bracket against the transom and then align the transducer with the bottom of boat. Use a pencil to mark the pilot holes through the center of the slots in the transom mount plate.
- 5. Drill the pilot holes into the boat's transom.
- **6.** Apply a marine high-grade below-waterline sealant/adhesive compound to the pilot holes.
- Align the transom mount plate screw slots over the pilot holes and fasten the bracket to the transom using the supplied screws.
- **8.** To make adjustments to transducer position, loosen the screws and slide bracket up or down.
- **9.** Set the angle of the transducer, and tighten the M6 screws that attach the transducer bracket mount plate to the transom mount plate.
- **10.** Route the transducer cable to the location where the display or sonar module is installed.
- **11.** Secure the transducer cable to the transom mount plate using one of the supplied cable ties.
  - → Note: Do not overtighten the cable ties to avoid damaging the cables.



**12.** Connect the transducer cable to the sonar port on the display or sonar module.

### Step mount using the transom bracket



The transducer can be mounted on a transom bracket. With this mounting option, the transducer will only be in the water when you are moving at trolling speed. The transducer will not be in the water when you are on plane. This mounting option provides the most protection to the transducer.

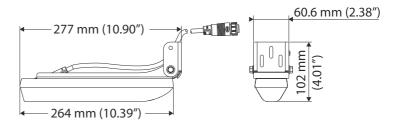
- → **Note:** Sonar does not track bottom when the transducer is out of the water.
- 1. Attach the transducer to the bracket mount plate using the 6 M4 attachment screws and M4 lock washers.
- 2. Loosely attach the transducer bracket mount plate to the transom mount plate using M6 screws and nuts.
- 3. Choose a transducer location
- → **Note:** If the transducer is not placed in a smooth flow of water, interference caused by bubbles and turbulence may cause loss of the bottom and digital depth on the MFD.
- **4.** Move the transducer bracket into the desired position and then use a pencil to mark the pilot holes through the center of the slots in the transom mount plate.
- 5. Drill the pilot holes.
- **6.** Apply a marine high-grade below-waterline sealant/adhesive compound to the pilot holes.
- Align the transom mount plate screw slots over the pilot holes and fasten the bracket to the transom using the supplied screws.
- **8.** To make adjustments to transducer position, loosen the screws and slide bracket up or down.

- **9.** Set the angle of the transducer and tighten the M6 screws that attach the transducer bracket mount plate to the transom mount plate.
- **10.** Route the transducer cable to the location where the display or sonar module is installed.
- **11.** Secure the transducer cable to the transom mount plate using one of the supplied cable ties.
  - → **Note:** Do not overtighten the cable ties to avoid damaging the cables.



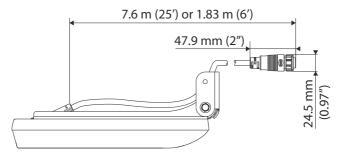
**12.** Connect the transducer cable to the sonar port on the display or sonar module.

## Transducer and transom mount bracket



## **Transducer cables**

→ **Note:** The transducers come with either a 7.6 m (25 ft) cable or a 1.83 m (6 ft) cable attached.



A 26 mm (1") diameter hole is recommended for cable connector clearance.

**Parts and accessories** 

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The most up-to-date parts and accessories are available at:

• www.lowrance.com

Part number	Description
000-16060-001	Active Imaging HD 3-in-1 FishReveal M/H
000-16061-001	Active Imaging HD 3-in-1 FishReveal HW
000-16062-001	Active Imaging HD 3-in-1
000-16063-001	Active Imaging HD 2-in-1
000-16094-001	Active Imaging HD Transom mount
000-00099-006	9-Pin transducer extension cable, 3 m (10 ft)

## **Technical specifications**



## **Active Imaging HD 3-in-1 transducers**

Environmental	
Operating temperature	-15°C to +55°C (+5°F to +131°F)
Storage temperature	-30°C to +70°C (-22°F to +158°F)
Physical	
Dimensions	See "Dimensions" on page 17
Cable length	1.8 m (6 ft) or 7.6 m (25 ft)
Weight	1.2 kg (2.6 lbs)
Mounting options	Transom mounting, step mounting
Number of pins	9 pins
Transducer	
Output	Chirp Sonar, SideScan Imaging, DownScan Imaging and Temperature
Frequency	Active Imaging HD 3-in-1, and Active Imaging HD 3-in-1 FishReveal M/H:  Sonar: 83 kHz/Medium Chirp, 200 kHz/High Chirp  DownScan: 700 kHz Chirp, 1200 kHz Chirp  SideScan: 455 kHz Chirp, 1075 kHz Chirp
	Active Imaging HD 3-in-1 FishReveal HW: Sonar: Wide Beam High Chirp, Wide Beam 200 kHz DownScan: 700 kHz Chirp, 1200 kHz Chirp SideScan: 455 kHz Chirp, 1075 kHz Chirp

DownScan FishReveal	<ul> <li>Available for:</li> <li>Active Imaging HD 3-in-1</li> <li>Active Imaging HD 3-in-1</li> <li>FishReveal M/H</li> <li>Active Imaging HD 3-in-1</li> <li>FishReveal HW</li> </ul>
SideScan FishReveal	Available for:  • Active Imaging HD 3-in-1 FishReveal M/H  • Active Imaging HD 3-in-1 FishReveal HW
Max depth	<ul> <li>Sonar: 305 m (1000 ft) at 200 kHz/High Chirp and 83 kHz/Medium Chirp</li> <li>DownScan: 46 m (150 ft) at 700 kHz, 27 m (90 ft) at 1200 kHz</li> <li>SideScan: 91 m (300 ft) side range at 455 kHz, 46 m (150 ft) side range at 1075 kHz</li> </ul>
Max operating speed	<ul><li>Sonar: 48 knots (55 mph)</li><li>DownScan and SideScan: 9 knots (10 mph)</li></ul>

## **Active Imaging HD 2-in-1 transducer**

F			
Environmental			
Operating temperature	-15°C to +55°C (+5°F to +131°F)		
Storage temperature	-30°C to +70°C (-22°F to +158°F)		
Physical			
Dimensions	See "Dimensions" on page 17		
Cable length	7.6 m (25 ft)		
Weight	1.2 kg (2.64 lbs)		
Mounting options	Transom mounting, step mounting		
Number of pins	9 pins		
Transducer			
Output	SideScan imaging, DownScan imaging, and temperature		
Frequency	<ul> <li>DownScan: 700 kHz Chirp, 1200 kHz Chirp</li> <li>SideScan: 455 kHz Chirp, 1075 kHz Chirp</li> </ul>		
FishReveal	No		
Max depth	<ul> <li>DownScan: 46 m (150 ft) at 700 kHz, 27 m (90 ft) at 1200 kHz</li> <li>SideScan: 91 m (300 ft) side range at 455 kHz Chirp, 46 m (150 ft) side range at 1075 kHz Chirp</li> </ul>		
Max operating speed	DownScan and SideScan: 9 knots (10 mph)		

## **Troubleshooting tips**

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Troubleshooting tips			
Transducer data not displayed	<ul> <li>Check unit software is compatible</li> <li>Check transducer cable is connected to display unit or sonar module (and it is connected to the display unit)</li> <li>Check sonar is enabled in display unit, refer to display unit Operator manual</li> <li>Check transducer is submerged in the water</li> </ul>		
No depth	Check range or turn on auto range		
Data washed out / same color	Turn down contrast; try different palettes		
Left/right data swapped on screen	Toggle the Flip Left/Right feature		
No source is displayed	<ul> <li>Make sure all switches are powered</li> <li>Ensure the sonar is enabled in display unit, refer to display unit Operator manual</li> <li>Check transducer cable is connected to display unit</li> </ul>		

