LOWRANCE

SIMRAD

StructureScan® 3D Transducer

Installation manual

ENGLISH

⚠ ***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.

Sonar performance: 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 this Installation and Operation Manual. We also recommend that you practice all operations using the built-in simulator before using this instrument on the water.

1 Contents

Your StructureScan 3D box is packed with the StructureScan 3D module, a power cable, fuse and fuse holder, StructureScan 3D Transducer, mounting bracket, 4.5 m (15 ft) ethernet cable and a hardware kit. The transducer has a 6 m (20 ft) cable attached.

Hardware mounting kit (included)	
	Transom mount screws (2)
	Bracket assembly bolts (2)
	Bracket assembly washers (4)
	Bracket assembly lock nuts (2)
	Transducer attachment screws (6)
	Transducer attachment washers (6)

Required tools and supplies (not included)	
Drill	Phillips (slotted-head screwdriver)
Drill bits	Marine grade above-or-below waterline sealant

2 Installation

Mounting options

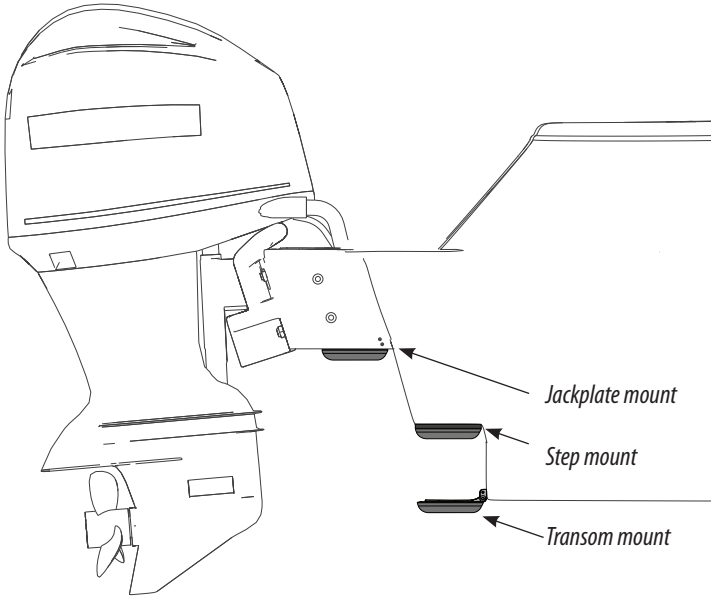
The StructureScan 3D Transducer can be mounted on the transom, jackplate, step or directly to your boat's hull.

➔ ***Note:*** Step and direct to hull mount requires the mounting bracket sold separately

When mounting it directly to the hull, you must purchase a high-quality, marine grade above- or below-waterline sealant/adhesive compound.

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

➔ ***Note:*** When mounting the StructureScan 3D Transducer, make sure there is nothing around the mounting location that could interfere with StructureScan 3D Transducer sonar beams.

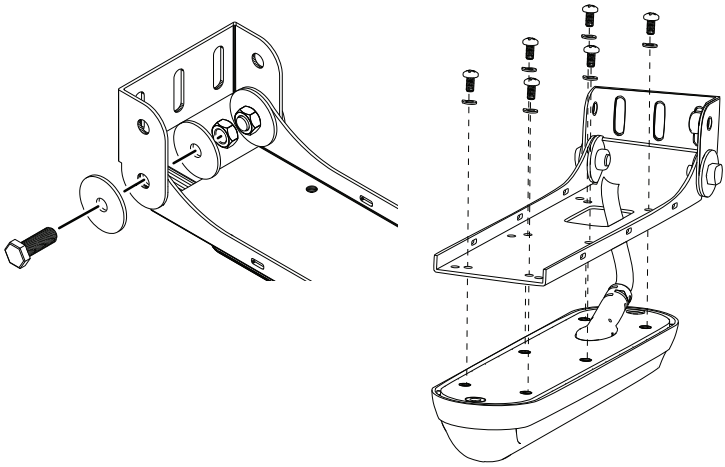


StructureScan 3D Transducer mounting options	
Transom mount (Page 8)	Keeps transducer in the water when the boat is on plane, allowing you to track bottom at high speeds Transducer angle can be adjusted so it is parallel with the water Transducer more likely to collide with obstructions in the water and adds drag to the boat
Jackplate mount (Page 9)	Transducer is not in the water when boat is on plane; protects transducer and prevents drag from transducer Transducer angle can be adjusted so it is parallel with the water Allows you to mount transducer without drilling holes in your boat Does not track bottom when boat is on plane
Step mount (Page 10)	Transducer is not in the water when boat is on plane; protects transducer and prevents drag from transducer Transducer angle can be adjusted so it is parallel with the water Does not track bottom when boat is on plane
Direct mount/Step (Page 11)	Transducer is not in the water when boat is on plane Protects transducer and prevents drag from transducer Transducer angle can not be adjusted so it is parallel with the water Does not track bottom when boat is on plane

Transom mount bracket assembly

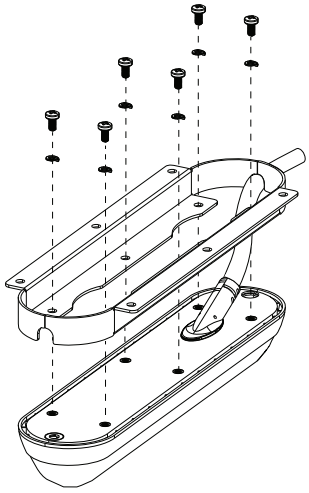
The StructureScan 3D Transducer transom bracket comes with four washers, two bolts and two nuts.

➔ ***Note:*** Ensure the cable has been threaded through the bracket before running the cable through the boat.



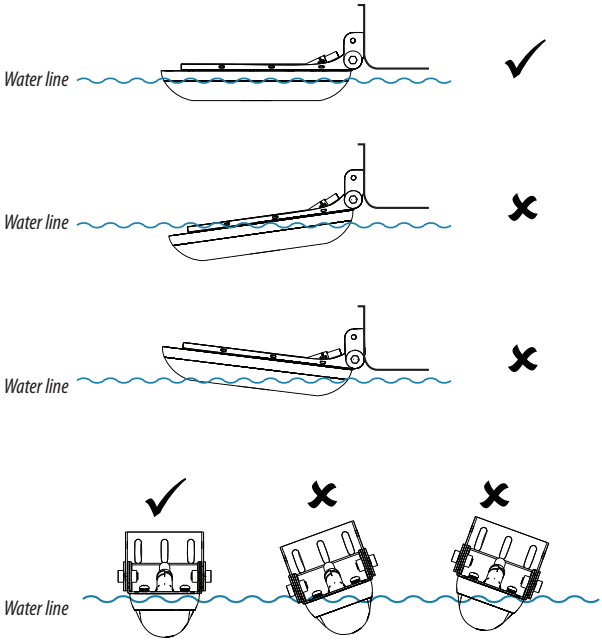
Flush mount bracket assembly

To mount the StructureScan 3D Transducer directly to the step (Step Mount), use the surface bracket (sold separately).



Transducer angle

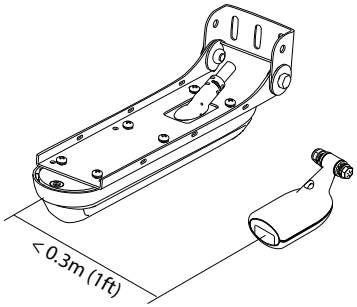
After mounting the StructureScan 3D Transducer, make sure the transducer is adjusted so it will be parallel with the waterline in both the horizontal and vertical axis when moving at trolling speed.



Downscan Overlay™

The StructureScan 3D 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.

Downscan overlay feature performance could be degraded if the StructureScan 3D Transducer is too far away from the broadband sounder transducer.



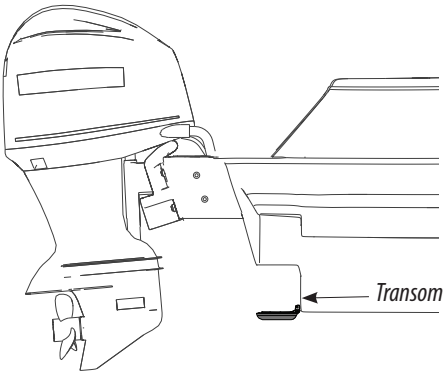
Transom mount (Transom bracket)

The StructureScan 3D 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.

Transom mount (fibreglass) supplies (not included)	
1/8" Drill bit (Transom mount pilot holes)	Marine grade above- or below-waterline sealant
Transom mount (aluminum hull) supplies (not included)	
M4 Machine Screws	Marine grade above- or below-waterline sealant
Plastic isolating material such as King Starboard (prevents corrosion between bracket and aluminum hull)	

To mount StructureScan 3D Transducer on transom:

1. Choose a transducer location and then route the transducer cable to the location where the StructureScan 3D module will be installed.
2. Place the transducer bracket against the transom and then align the bottom of the transducer with the bottom of boat. Use a pencil to mark the pilot holes through the slots in the transducer bracket.
3. Drill the pilot holes into the boat's transom.
4. Apply a high-grade above- or below-waterline sealant to the pilot holes.
5. Align the bracket slots over the pilot holes and fasten the bracket to the transom using your drill and the supplied screws.
6. To make adjustments to transducer position, loosen the screws and slide bracket up or down.
7. Connect the transducer cables to the StructureScan 3D module sonar ports.



Jackplate mount (Transom bracket)

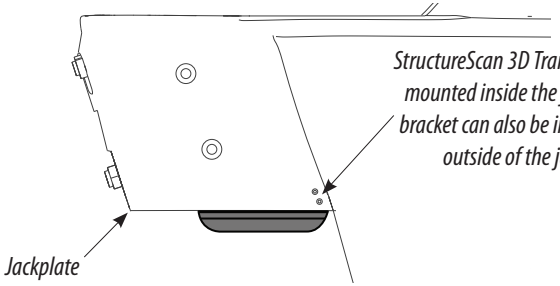
The StructureScan 3D Transducer can be mounted inside or outside of the jackplate by drilling through the jackplate and then running bolts though the hinge hole in the side of the bracket into the jackplate.

Jackplate mount supplies (not included)	
M6 or 1/4" Drill bit (Jackplate Mount) pilot holes	1/4" (M6) jackplate mount bolts

> ⚠ ***Warning:*** Before installing the StructureScan 3D Transducer on the jackplate, lower the jackplate to its lowest setting to make sure there is enough clearance between the jack plate/ engine and the transducer. Lack of clearance could damage the transducer when the engine is all the way down.

To mount StructureScan 3D Transducer on jackplate:

1. Choose a transducer location on the inside or outside of the jackplate.
2. Adjust the jackplate up and down to make sure the transducer will not obstruct jackplate movement.
3. Make sure nothing blocks the sonar beam on either side of the transducer.
4. Route the transducer cable to the location where the module will be installed.
5. Move the transducer bracket into the desired position and use a pencil to mark the holes through the hinge hole and hole in the side of the bracket.
6. Using a M6 or equivalent drill bit, drill the holes into the jackplate.
7. Slide the bracket inside the jackplate and align the bracket holes with holes you drilled in the jackplate.
8. Slide M6 bolts with washers into each hole on the side of jackplate.
9. Guide the bolts through the StructureScan 3D Transducer bracket holes.
10. Place a washer over the end of the bolts and tighten the nuts.
11. Connect the transducer cables to the StructureScan 3D module sonar ports.



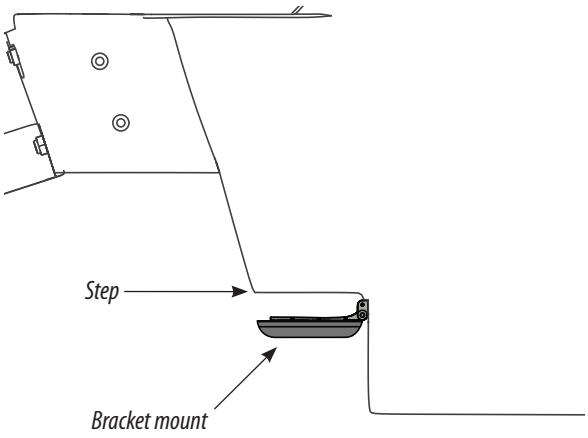
Step mount (Transom bracket)

The StructureScan 3D 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.

Step mount supplies (not included)	
1/8" Drill bit (Transom mount pilot holes)	Marine grade above- or below-waterline sealant

To use step mount:

1. Choose a transducer location.
2. Route the transducer cable to the location where the StructureScan 3D module will be installed.
3. Move the transducer bracket into the desired position and then use a pencil to mark the pilot holes through the slots in the bracket.
4. Drill the pilot holes.
5. Apply a high-grade above- or below-waterline sealant to the pilot holes.
6. Align the bracket slots over the pilot holes and fasten the bracket to the transom using your drill and the supplied screws.
7. To make adjustments to transducer position, loosen the screws and slide bracket up or down.
8. Connect the transducer cables to the StructureScan 3D module sonar ports.



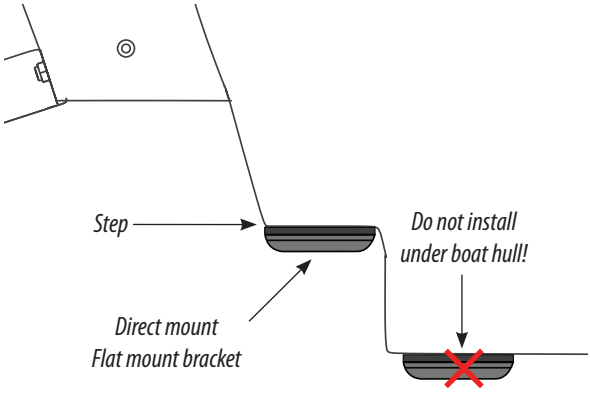
Direct/Step mount (Flush bracket)

When using the direct mount installation shown below, you MUST turn on the Flip Left/Right feature. Refer to your Operation manual for more information..

Direct step mount bracket and supplies (not included)	
3/32 Drill bit (Direct/Step mount pilot holes)	Marine grade above- or below-waterline sealant

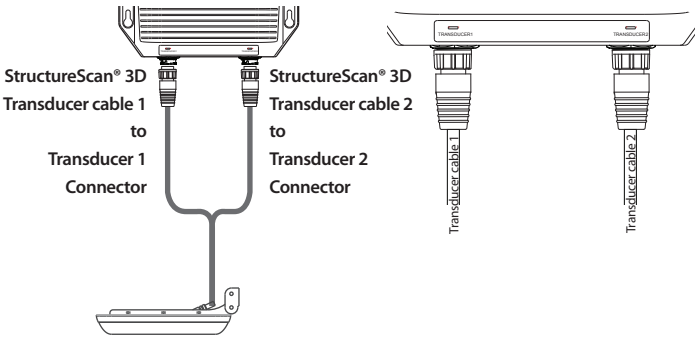
To use direct mount:

1. Make sure the boat's step is the same length or longer than the StructureScan 3D Transducer.
2. After selecting a mounting location, route the transducer cable to the location where the StructureScan 3D module will be installed.
3. Attach the transducer to the surface bracket and hold in the desired position. Use a pencil to mark pilot holes through the mounting holes on the surface bracket.
4. Drill the pilot holes.
5. Apply a high-grade above- or below-waterline sealant to the pilot holes.
6. Align the transducer mounting holes over the pilot holes and mount the transducer to the step using self-tapping metal screws (not supplied). Do NOT overtighten the screws; otherwise you could strip out the fiberglass pilot holes or crack the mounting holes on the StructureScan 3D Transducer.
7. Connect the transducer cables to the StructureScan 3D module sonar ports and then turn on the Flip Left/Right feature on your display unit.



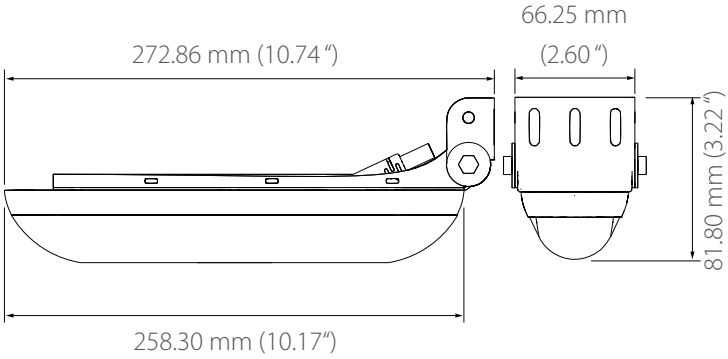
➔ ***NOTE:*** When using a Direct Step Mount, you must turn on the Flip Left/Right feature in your display unit to ensure what is shown on the left/right side on your display, corresponds with what is on the left/right side of your boat.

Connecting the transducer

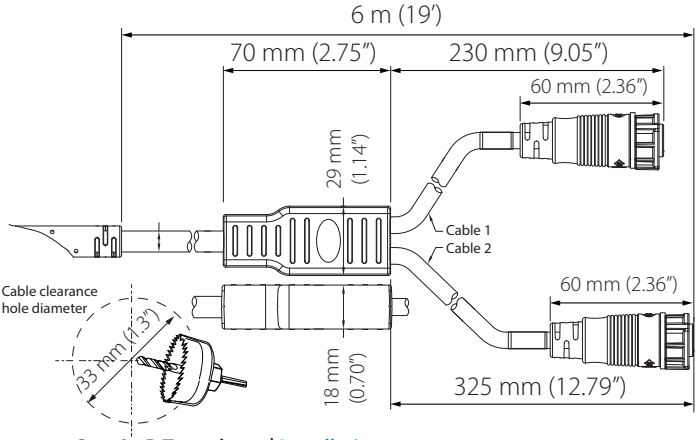


Dimensions

Transducer and transom mount bracket



Transducer cable



Parts and accessories

StructureScan 3D module (000-12397-001) Service part only	
StructureScan 3D module mounting screws (4)	Closed-end crimp connector
Fuse and fuse holder	Power cable
Ethernet cable (15 ft)	

StructureScan 3D Transducer (000-12396-001) Service part only	
Transom mount screws (2)	Bracket assembly nuts (2)
Transducer attachment lock nuts (6)	Transducer attachment screws (6)
Bracket assembly bolts (2)	Bracket assembly washers (4)

StructureScan 3D & HD Skimmer transom mount (000-12603-001)	
Transom mount screws (2)	Bracket assembly nuts (2)
Transducer attachment lock nuts (6)	Transducer attachment screws (6)
Bracket assembly bolts (2)	Bracket assembly washers (4)

StructureScan 3D Transducer flush mount (000-12602-001)	
Bracket assembly pieces (2)	Use other items from transom bracket assembly

StructureScan 3D system specifications	
Power Requirement	12 Volts
Voltage Input	12 V - 24 V
Transmit Power	WRMS: 500 W WPK: 4000 W
Current Drain	Max: .75 A Typical: .60 A Inrush: 4.7 A pk
Fuse Type	External: 3 A Fast Acting Automotive Blade
Transducer Cable	20 feet (6 m)
Target Separation	1.5" (38.1 mm)
Transducer Frequency	455 kHz
Communication	Ethernet
Shared devices supported	3
Weight	StructureScan 3D module (1.8 lbs) Transducer (1.9 lbs) Transducer with bracket (2.55 lbs)

Sidescan specifications	
Max Range	455 kHz (1200 ft - 600 per side)
Max Speed	35 mph (56 kmh)
Mark objects	15 mph (24 kmh)
Optimum speed	10 mph (16 kmh) or less

Downscan specifications	
Max Depth	150 ft
Max Speed	55 mph (88 kmh)
Mark objects	35 mph (56 kmh)
Optimum speed	10 mph (16 kmh) or less

StructureScan 3D system troubleshooting tips	
StructureScan 3D data not displayed	• Make sure StructureScan 3D module is powered • Check unit software is compatable • Make sure yellow wire is connected to switched power source • Check fuse
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	• Make sure the Multi-Function Display and StructureScan 3D module are powered and connected to ethernet network • Make sure all switches are powered • Check Ethernet LED to see which units are not communicating

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