

LOWRANCE®

SIMRAD®

StructureScan® 3D Transducer

Installation manual

English

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Warranty

This product's warranty is supplied as a separate document.

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This product's safety, disclaimer and compliance statements are supplied as a separate document.

Internet usage

Some features in this product use an internet connection to perform data downloads and uploads. Internet usage via a connected mobile/cell phone internet connection or a pay-per-MB type internet connection may require large data usage. Your service provider may charge you based on the amount of data you transfer. If you are unsure, contact your service provider to confirm rates and restrictions.

More information

Features described in this document may vary from your unit due to connected devices, settings, brand, and continuous software development.

For the latest version of this document in supported languages, and other related documentation, visit www.lowrance.com/downloads or www.simrad-yachting.com/downloads.

Contact us

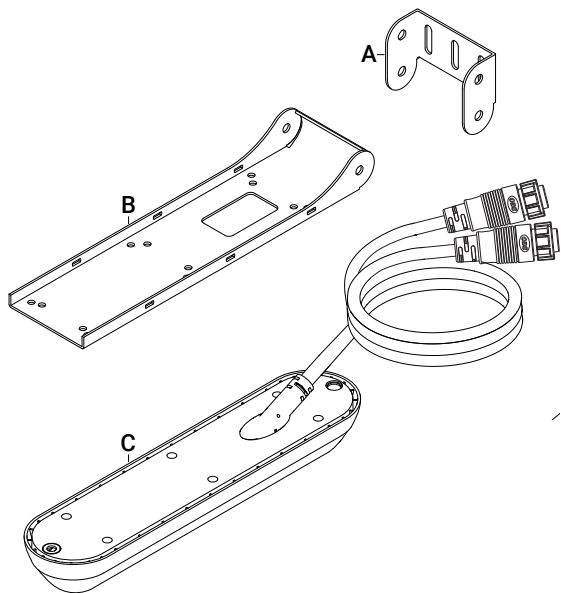
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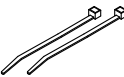
Included with the StructureScan 3D Transducer, is the transom mounting bracket assembly parts, and a hardware mounting kit. The transducer has a 6 m (20 ft) cable attached.



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

Hardware mounting kit (included)	
	Transom mount screws #10x1-1/4# (3)
	#10 flat washers for transom mount screws (3)
	Bracket assembly bolt M6 flanged head (2)
	Bracket assembly flanged nut M6 (2)
	Transducer attachment screws M4x8mm (6)

Hardware mounting kit (included)

	Transducer attachment lock washers M4 (6)
	Cable ties (2), used to secure the cable as needed

Required tools and supplies (not included)

Drill	Phillips (cross-head) screwdriver
Drill bits	Marine high-grade above- or below- waterline sealant/ adhesive compound

INSTALLATION

Mounting options

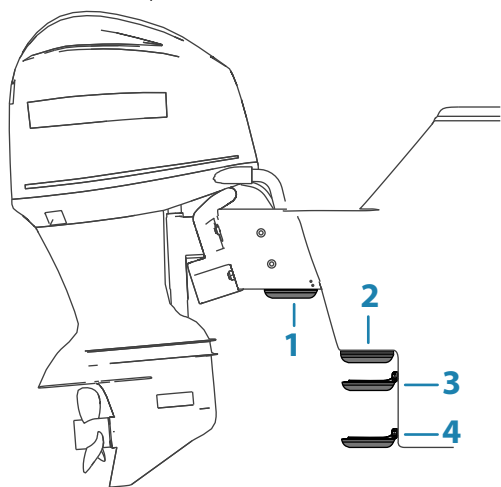
→ **Note:** Always wear appropriate eyewear, ear protection and dust mask when drilling, cutting, or sanding. Remember to check the reverse side of all surfaces whenever drilling or cutting.

The transducer can be mounted on the transom, jackplate, or step. Use the following table to determine which mounting option is best suited to your boat/installation preferences.

→ **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.



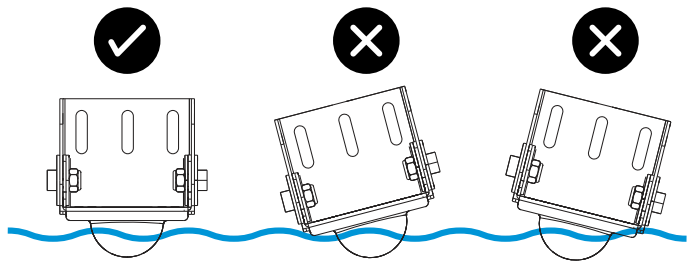
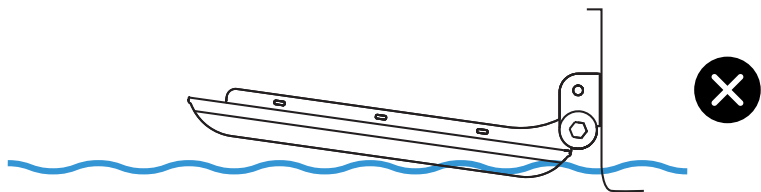
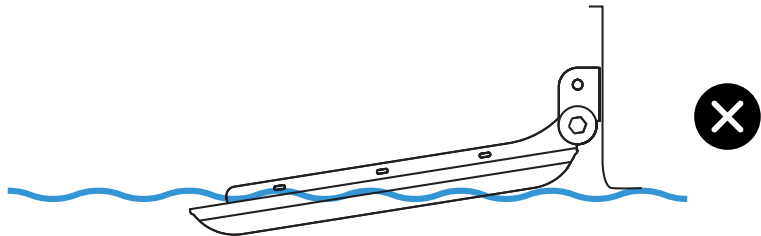
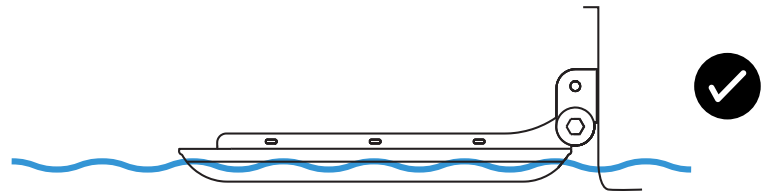
- 1 Jackplate mount (Transom bracket)
- 2 Direct Step mount (Flush bracket) Requires separately sold Skimmer Flush mount kit (part no. 000-12602-001)
- 3 Step mount (Transom bracket)
- 4 Transom mount (Transom bracket)

StructureScan 3D transducer mounting options

Transom mount (Transom bracket) Refer to "Transom and step mount (Transom bracket)" on page 9.	• 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.
Step mount (Transom bracket) Refer to "Transom and step mount (Transom bracket)" on 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. • Sonar does not track bottom when transducer comes out of the water.
"Jackplate mount (transom bracket)" on page 13.	• 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. • Sonar does not track bottom when transducer comes out of the water.
"Direct Step mount (Flush bracket)" on page 10 Requires separately sold Skimmer Flush mount kit (part no. 000-12602-001).	• Transducer is not in the water when boat is on plane; protects transducer and prevents drag from transducer. • Transducer angle cannot be adjusted so it is parallel with the water. • Sonar does not track bottom when transducer comes out of the water.

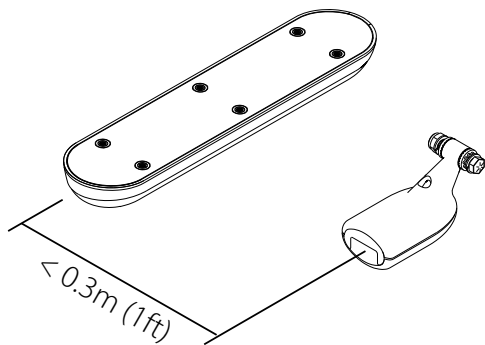
Transducer angle

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

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.



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.

→ *Note: Sonar does not track bottom when the transducer is out of the water.*

Transom and Step mount (fiberglass) supplies (not included)	
3 mm (1/8") Drill bit (Transom mount pilot holes)	Marine high-grade above- or below-waterline sealant/ adhesive compound

Transom mount (aluminum hull) supplies (not included)	
M5 Machine Screws (3)	Marine high-grade above- or below-waterline sealant/ adhesive compound

Plastic isolating material such as King StarBoard® marine grade polymer sheets (to prevent corrosion between bracket and aluminum hull)

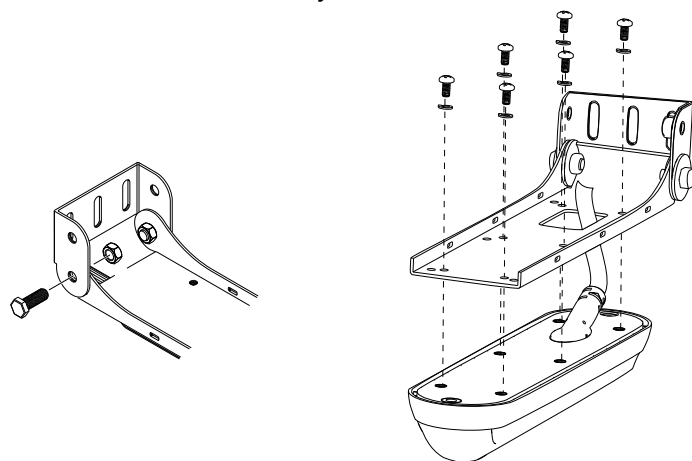
To mount on transom or step using the transom bracket

- 1 Attach the bracket to the transducer using the 6x 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 above- or below-waterline sealant/ adhesive compound to the pilot holes.
- 7 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. Reattach the transducer bracket to the transom mounting plate.
- 10 Route the transducer cable to the location where the sonar module is installed.
- 11 Secure the transducer cable using one of the supplied cable ties.
- 12 Connect the transducer cables to the module ports. Refer to **"Connecting the transducer"** on page 14.

After the transducer is connected and your boat is in the water, turn on the Flip Left/Right feature on your display to ensure what is shown on the left and right side on your display corresponds with what is on the left and right side of your boat. Refer to your display's Operation manual for more information.

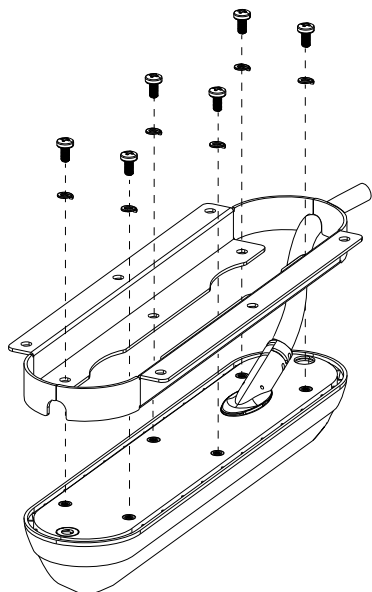
Transom bracket assembly



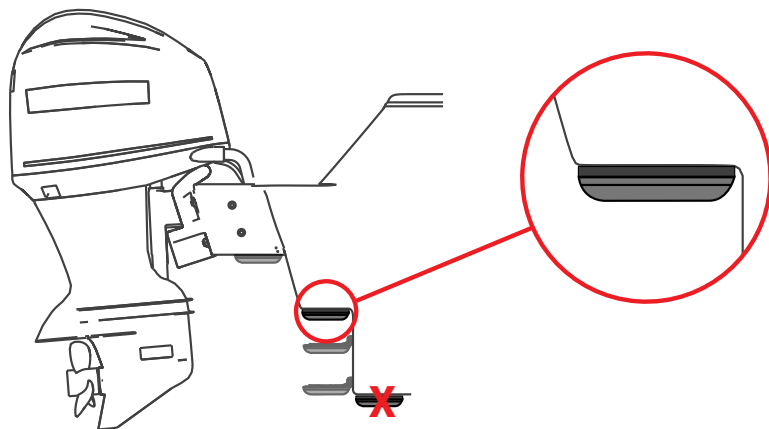
Direct Step mount (Flush bracket)

Flush mount bracket assembly

To mount the transducer directly to the step (Direct Step mount), use the flush mount bracket (sold separately, part no. 000-12602-001).



Direct step mount (flush bracket) installation



→ **Note:** Do not install the transducer under the hull.

You can mount the transducer in either direction with the cable coming out towards or away from the transom when installing with the direct step (flush bracket) mount.

→ **Note:** Sonar does not track bottom when the transducer is out of the water.

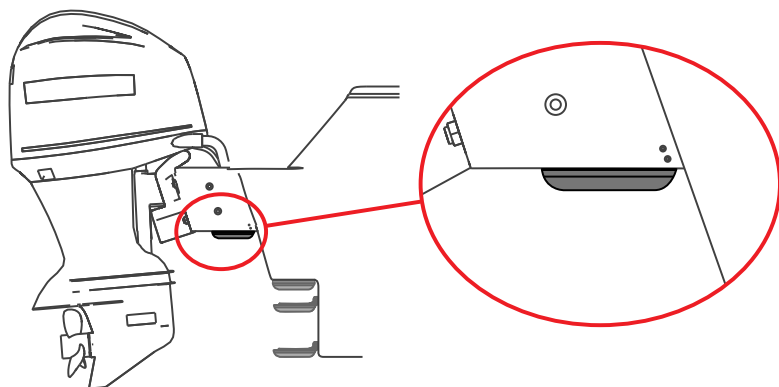
Direct step mount bracket and supplies (not included)	
Pilot hole drill bit (Direct Step mount pilot holes for self-tapping metal screws)	Marine high-grade above or below-waterline sealant/adhesive compound
Maximum 5 mm (#10 or 3/16") self-tapping metal screws	

To direct step mount using flush bracket

- 1 Make sure the boat's step is the same length or longer than the transducer.
- 2 After selecting a mounting location, route the transducer cable to the location where the display 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 marine high-grade above- or below-waterline sealant/adhesive compound 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 transducer.
- 7 Connect the transducer cables to the module ports. Refer to **"Connecting the transducer"** on page 14.

After the transducer is connected and your boat is in the water, turn on the Flip Left/Right feature in your display unit to ensure what is shown on the left and right side on your display corresponds with what is on the left and right side of your boat. Refer to your display unit's Operation manual for more information.

Jackplate mount (transom bracket)



The transducer transom bracket can be mounted inside or outside of the jackplate by drilling through the jackplate and then running bolts through the hinge hole in the side of the bracket into the jackplate. The illustration above shows the transom bracket mounted inside the jackplate.

→ **Note:** Sonar does not track bottom when the transducer is out of the water.

Jackplate mount supplies (not included)

6 mm (1/4") Drill bit (Jackplate Mount)

M6 (1/4") jackplate mount bolts

⚠ Warning: Before installing the transducer on the jackplate, lower the jackplate to its lowest setting to make sure there is enough clearance between the jackplate, engine, transom, and the transducer. Lack of clearance could damage the transducer when the engine is all the way down.

To mount transducer on jackplate using transom bracket

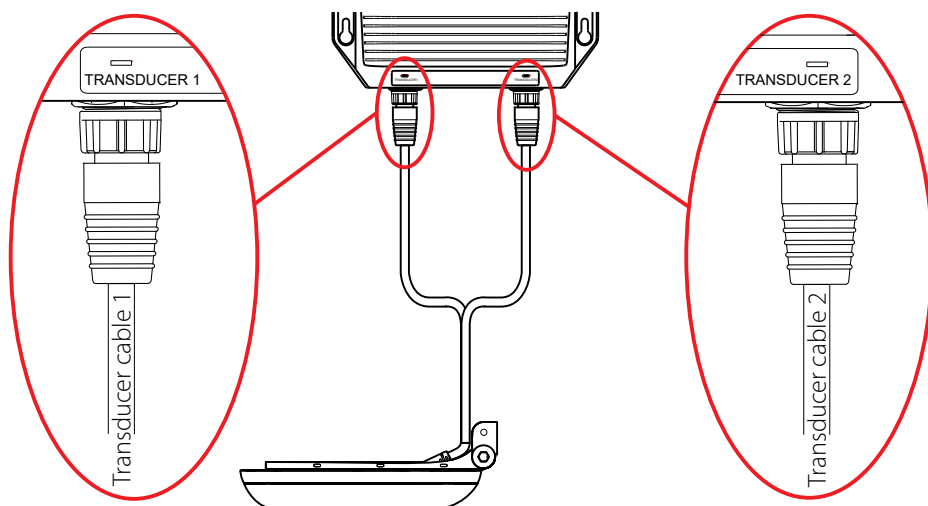
- 1 Choose a transducer location on the inside or outside of the jackplate.
- 2 Adjust the jackplate up and down to make sure the transducer will not obstruct jackplate movement.
- 3 Make sure nothing blocks the sonar beam on either side of the transducer.
- 4 Route the transducer cables through the bracket 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 6mm 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 Transducer mounting bracket holes.
- 10 Place a washer over the end of the bolts and tighten the nuts.

- 11 Connect the transducer cables to the module ports. Refer to “**Connecting the transducer**” on page 14.

After the transducer is connected and your boat is in the water, turn on the Flip Left/Right feature in your display unit to ensure what is shown on the left and right side on your display corresponds with what is on the left and right side of your boat. Refer to your display unit's Operation manual for more information.

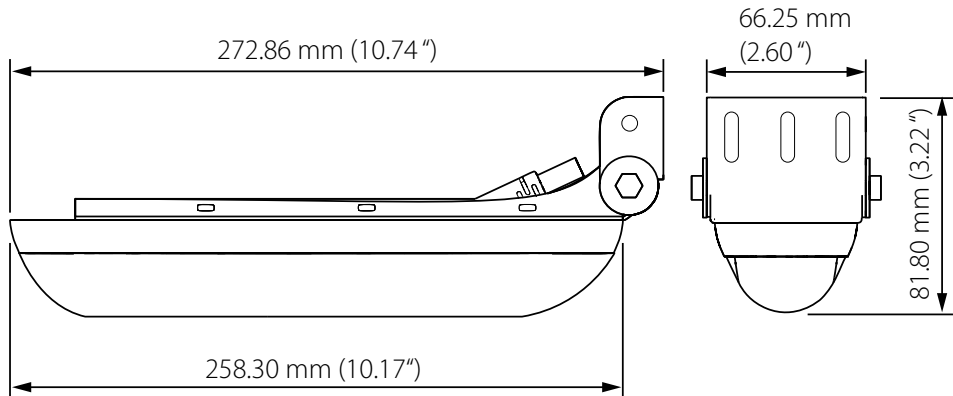
Connecting the transducer

→ **Note:** If the cables are not connected correctly the StructureScan 3D will not function.

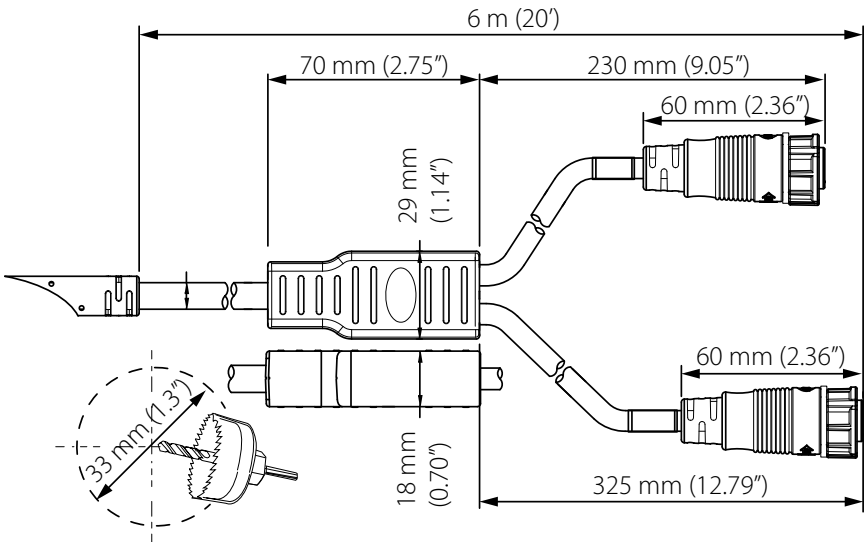


DIMENSIONS

Transducer and transom mount bracket



Transducer cable



A 33mm (1.3") diameter hole is recommended for cable clearance.

PARTS AND ACCESSORIES

The most up-to-date parts and accessories are available at: www.simrad-yachting.com or www.lowrance.com.

StructureScan 3D Transducer (000-12396-001) Includes transducer, transom mounting bracket, and assembly and mounting screws, washers, and nuts.

StructureScan 3D (plastic) Skimmer Transom mount kit (000-13522-001) Includes transom mounting bracket, and bracket assembly and mounting screws, washers, and nuts. For mounting transducer on transom/step.

StructureScan 3D, StructureScan HD & TotalScan Skimmer Transom mount kit (000-12603-001) Includes transom mounting bracket, and bracket assembly and mounting screws, washers, and nuts. For mounting transducer on jackplate.

StructureScan 3D & TotalScan Skimmer Flush mount kit (000-12602-001) Includes 2 piece Flush mount mounting bracket. Use assembly and mounting hardware supplied with the transducer.

Transducer Extension Cables for StructureScan 3D - 10 ft (000-12752-001).

SPECIFICATIONS

SideScan specifications	
Max Range	455 kHz - 365 m (1200 ft) total, 182 m (600 ft) on each side
Max Speed	56 kph (35 mph)
Mark objects	24 kph (15 mph)
Optimum speed	16 kph (10 mph) or less

Downscan specifications	
Max Depth	60 m (200 ft)
Max Speed	88 kph (55 mph)
Mark objects	56 kph (35 mph)
Optimum speed	16 kph (10 mph) or less

TROUBLESHOOTING TIPS

Troubleshooting tips	
StructureScan 3D data not displayed	• Make sure StructureScan 3D module is powered ON. • Check that MFD software is compatible. • Make sure yellow wire is connected to a switched power source. • Check the fuse.
No depth	Check the range, or turn on auto range.
Data washed out / same color	Turn down the contrast, or try a different palette.
Left/right data swapped on screen	Toggle the Flip left/Right feature.
No source is displayed	• Make sure the MFD and StructureScan 3D module are powered and connected to the Ethernet network. • Make sure all switches are powered. • Check Ethernet LED to verify which units are communicating.

