



Panoptix™ PS 30/31



Installation Instructions

Important Safety Information

⚠ WARNING

See the *Important Safety and Product Information* guide in the 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.

This equipment should be installed by a qualified marine installer.

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 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.

Loading the New Software on a Memory Card

- 1 Insert a memory card into the card slot on the computer.
- 2 Go to www.garmin.com/support/software/marine.html.
- 3 Select **Download** next to "Garmin Marine Network with SD card".
- 4 Read and agree to the terms.
- 5 Select **Download**.
- 6 Select **Run**.
- 7 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.

The device returns to normal operation after the software update process is complete.

- 5 Remove the memory card.

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

About the Transducer

The transducer transmits and receives sound waves through the water, and relays sound-wave information to your Garmin sonar device.

Tools Needed

- #2 Phillips screwdriver
- 4 mm ($\frac{5}{32}$ in.) drill bit
- Drill
- Masking tape (optional)
- 13 mm ($\frac{1}{2}$ in.) Socket
- 13 mm ($\frac{1}{2}$ in.) Wrench
- Marine sealant

Mounting Location Considerations

- 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 can place a significant strain on less-rugged trolling motors. Consider the weight and drag of the mounting hardware and transducer before mounting it on the trolling motor.
- The transducer must be in clean (non-turbulent) water for optimal performance.
- For optimal results, mount the transducer as close to the center line as possible. Mounting to one side can affect the handling of the boat.
- 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.
- On twin-drive boats, the transducer should be mounted between the drives, if possible.
- For the downward-facing transducer, the cables should be routed out of the transducer to the starboard side of the boat, with the logo on the transducer facing the port side of the boat.
- The forward-facing transducer should be mounted in a location that allows a view of the surface of the water in front of the boat.
- The forward-facing transducer should be mounted in a location that is out of the water at speeds over 40 km/h (25 mph).
- For a forward-facing transducer mounted on a trolling motor, the cables should be routed out of the transducer toward the

trolling motor (downward if mounted on the shaft, upward if mounted below the motor).

- For a forward-facing transducer mounted on a transom mount, the cables should be routed out of the transducer toward the transom.

Transducer Mounting Angle Considerations

NOTICE

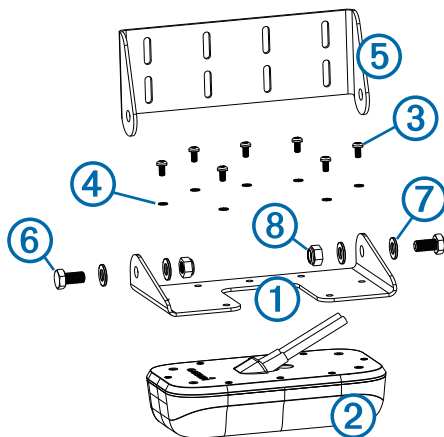
The forward-view mount is not rated for speeds over 40 km/h (25 mph).

- The internal attitude heading and reference system (AHRS) sensor detects the mounting angle of the transducer in relation to the water surface. When the Use AHRS setting is turned off in the chartplotter installation menu, it is assumed the transducer is mounted at a 45-degree angle and the down-view transducer is mounted at a 0-degree angle.
- The higher the degree of the mounting angle and the more vertical the transducer, the less a strong bottom echo interferes with viewing targets in the water. To see more suspended targets, you should mount the transducer at a higher-degree, more vertical angle.
- To reduce rings that can appear with a strong bottom echo, you should mount the transducer at a higher degree, more vertical angle.

Installing the Transducer on a Transom

Assembling the Transom-Mount Hardware

- 1 Attach the transducer mount bracket ① to the transducer ② using four of the included 7 mm M4 mounting screws ③ and M4 lock washers ④.



- 2 Attach the transducer mount bracket to the transom mount bracket ⑤ using the included 16 mm M8 bolts ⑥, M8 flat washers ⑦, and M8 lock nuts ⑧.
- 3 Route the Ethernet cable to the installation location of the network switch or to the back of the MFD.

NOTE: The cable should not be routed close to electrical wires or other sources of electrical interference.

TIP: Cutting the cables is not recommended, but a field installation kit can be purchased from Garmin or a Garmin dealer if cutting the cables is necessary.

- 4 Route the power cable to a 12 Vdc power source.

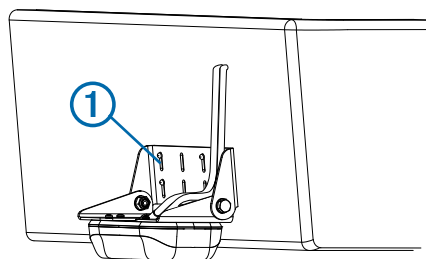
Installing the Transom-Mount Hardware

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.

- 1 Position the transducer mount ① so the bottom of the transducer sits below the water line.



- 2 Mark the location of the holes of the transducer mount.
- 3 Using a 4 mm ($\frac{5}{32}$ in.) bit, drill the pilot holes approximately 15 mm ($\frac{19}{32}$ in.) deep at the marked locations.
- 4 Apply marine sealant to four of the provided 8 mm M4 mounting screws, and attach the transducer assembly to the transom using the M4 screws and M4 lock washers.

TIP: On boats with thinner hulls, you can place a wood backing block inside the hull at the mounting spot to lessen the pressure on the mounting screws.

- 5 If possible, route the cables to come out of the transducer on the starboard side.

NOTE: If you must route the cables to come out the port side, you must select the Flipped option in your chartplotter installation menu for an accurate display.

- 6 For the downward-facing transducer, adjust the mount so the transducer points straight down.
- 7 For the forward-facing transducer, adjust the mount so the transducer points toward the front of the boat at an angle based on the transducer mounting angle considerations.
- 8 For the forward-facing transducer, adjust the bolt tension to allow the mount to close if the transducer collides with an object.

Installing the Transducer on a Trolling Motor

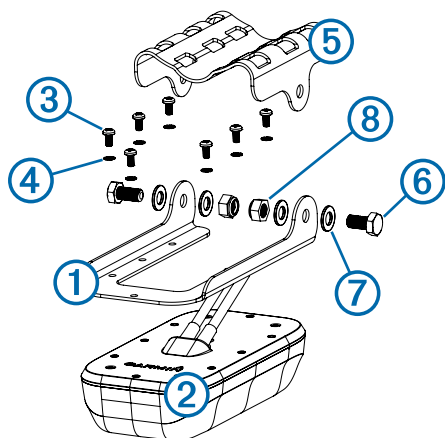
Trolling Motor Mount Considerations

- Placement of the transducer on a trolling motor depends on the type of trolling motor you have installed on your boat. Check with your trolling motor manufacturer for information on the proper placement of your trolling motor mount.
- The transducer should be mounted on the shaft on most cable-steered trolling motors, because the motor may not be rugged enough to support the weight of the transducer and mount. This mounting location blocks the view directly below the trolling motor, but allows for a longer-range forward view because there is less bottom interference. Mounting the transducer on the shaft also offers more protection, and the weight of the transducer and mounting hardware place less strain on the trolling motor system.
- The transducer should not be mounted on the motor of some types of trolling motors, because the transducer can damage the steering cables and bearings, and it can hit the boat hull during deployment and retraction.
- The transducer can be mounted on the motor of some hand-steered and wireless trolling motors, but you must make sure you can safely deploy and retract the trolling motor with the transducer attached.
- On trolling motors with steering cables, place the transducer as close to the center line of rotation as possible to decrease the resistance on the motor.

- Mount the transducer so it does not obstruct the motor from its storage cradle or prevent the motor from being stowed and deployed correctly.

Assembling the Trolling-Mount Hardware

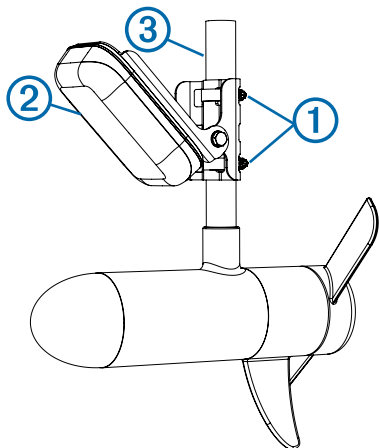
- 1 Attach the transducer mount bracket ① to the transducer ② using the included 7 mm M4 mounting screws ③ and M4 lock washers ④.



- 2 Attach the transducer mount bracket to the trolling mount bracket ⑤ using the included 16 mm M8 bolts ⑥, M8 flat washers ⑦, and M8 lock nuts ⑧.

Attaching the Transducer to a Trolling Motor Shaft

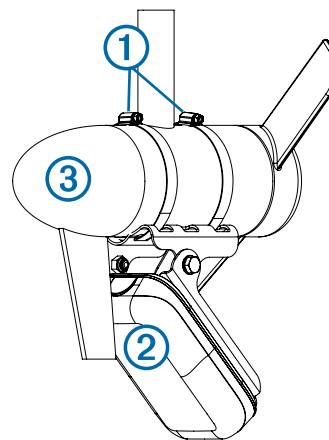
- 1 Insert the hose clamps ① through the slots on the trolling motor mount ②.



- 2 Slide the hose clamps around the trolling motor shaft ③.
- 3 Tighten the hose clamps.
- 4 Secure the transducer cable to the shaft or other secure location.
- 5 Route the Ethernet cable to the installation location of the network switch or to the back of the chartplotter.
NOTE: The cable should not be routed close to electrical wires or other sources of electrical interference.
- 6 Route the power cable to a 12 Vdc power source.
- 7 Adjust the mount so it points toward the front of the boat at an angle based on the transducer angle considerations.

Attaching the Transducer to a Trolling Motor

- 1 Insert the hose clamps ① through the slots on the trolling motor mount ②.



- 2 Slide the hose clamps around the trolling motor ③.
- 3 With the motor placed as close to the center line of rotation as possible, tighten the hose clamps.
- 4 Secure the transducer cable to the motor shaft or other secure location.
NOTE: Ensure the trolling motor and transducer clear the boat during deployment and retraction.
- 5 Route the Ethernet cable to the installation location of the network switch or to the back of the MFD 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 and retracted.
 - Cutting the cables is not recommended, but a field installation kit can be purchased from Garmin or a Garmin dealer if cutting the cables is necessary.
- 6 Add cable wraps to secure the cable, and provide a circular service loop to allow the trolling motor to rotate.
- 7 Route the power cable to a 12 Vdc power source.
- 8 For a downward-facing transducer, adjust the mount so the transducer points straight down.
- 9 For a forward-facing transducer, adjust the mount so the transducer points toward the front of the boat at an angle based on the transducer mounting angle considerations.

Specifications

Specification	Measurement
Dimensions (W x H x L)	9.1 x 4.2 x 17 cm (3.6 x 1.7 x 6.7 in.)
Weight	800 g (1.8 lb.)
Max. power usage	10 W
Temperature range	- Operating: From 0 to 40°C (from 32 to 104°F) - Storage: From -40 to 70°C (from -40 to 158°F).
Material	ASA plastic
Maximum depth*	91 m (300 ft.)
Frequency	417 kHz

* Dependent upon transducer placement, water salinity, bottom type, and other water conditions.

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