

**GARMIN™**

## Transom Mount Intelliducer™ Installation Instructions

To obtain the best possible performance, install your Transom Mount Intelliducer according to the following instructions. If you experience difficulty during the installation, contact Garmin Product Support, or seek the advice of a professional installer.

This Transom Mount Intelliducer provides depth information either to a NMEA 0183-compatible device, or to your existing NMEA 2000® network, depending on the model. For more information about NMEA 2000, visit [www.garmin.com](http://www.garmin.com).

**WARNING:** See the *Important Safety and Product Information* guide in the product box for product warnings and other important information.

### Product Registration

Help us better support you by completing our online registration today! Connect to our Web site at <http://my.garmin.com>. Keep the original sales receipt, or a photocopy, in a safe place.

For future reference, write the serial number assigned to your Intelliducer in the space provided. The serial number is located on a sticker around the cable.

**Serial number** \_\_\_\_\_

### Contact Garmin

Contact Garmin if you have any questions while installing or using your Intelliducer. In the USA contact Garmin Product Support by phone: (913) 397-8200 or (800) 800-1020, or go to [www.garmin.com/support/](http://www.garmin.com/support/).

In Europe, contact Garmin (Europe) Ltd. at +44 (0) 870.8501241 (outside the UK) or 0808 2380000 (within the UK).

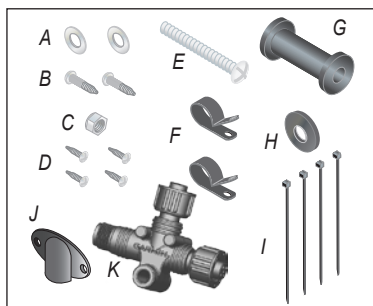
### Packing List and Tools Needed

Before installing your Intelliducer, confirm that your package includes the following items. If any parts are missing, contact your Garmin dealer immediately.

#### Standard Package

- Transom Mount Intelliducer (not pictured)

- A – 5 mm flat washers (2)
- B – 5 × 30 mm screws (2)
- C – 10-32 lock nut (1)
- D – 4 × 12 mm screw (4)
- E – 10-32 × 1.75 in. screw (1)
- F – 1/4 in. cable clamps (2)
- G – Plastic spacer (1)
- H – 1/4 in. rubber washer (1)
- I – Cable tie, 5.6 in. (4)
- J – Cable entry cover (1)
- K – NMEA 2000 T-connector (1)  
(NMEA 2000 Intelliducer only)



#### Tools Needed

- Drill and drill bits
- 3/8 in. (9.5 mm) wrench or socket
- Masking tape
- Number 2 Phillips screwdriver
- Marine sealant

## Install the Intelliducer

### To install the Transom Mount Intelliducer:

1. Assemble the Intelliducer.
2. Mount the Intelliducer.
3. Connect the Intelliducer your existing NMEA 2000 network.

OR

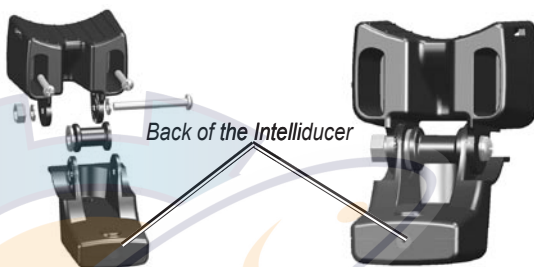
Connect the Intelliducer to power and a NMEA 0183-compatible device.

4. Update your Garmin chartplotter (if applicable).

## Step 1: Assemble the Intelliducer

### To assemble the Intelliducer:

1. Insert the rubber washer and the plastic spacer into the Intelliducer at the same time. DO NOT lubricate the rubber washer.
2. Route the NMEA 2000 or power/data cable toward the back of the Intelliducer. Slide the Intelliducer into the Intelliducer mount.
3. Place the 5 mm flat washer on the 10-32  $\times$  1.75 in. screw, and insert the screw through the Intelliducer mount, the spacer, and the rubber washer.
4. Place the remaining 5 mm flat washer on the exposed end of the 10-32  $\times$  1.75 in. screw. Install the 10-32 locknut finger tight. Retighten the Intelliducer after installation on the boat.



## Step 2: Mount the Intelliducer

When selecting a transom-mount location, consider the following for optimal performance:

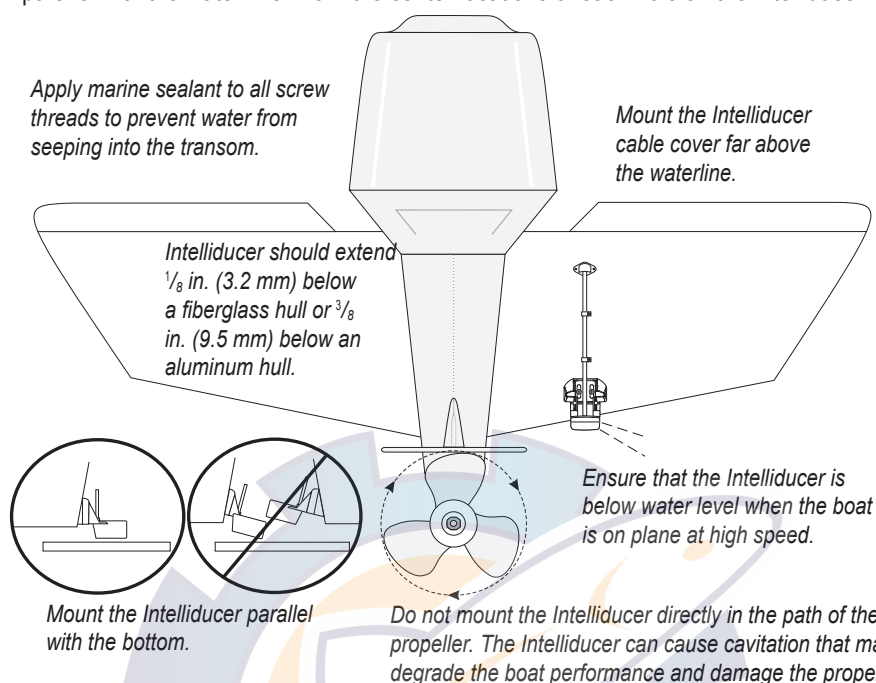
- For your sonar to operate properly, the Intelliducer must be located in calm water.
- Mount the Intelliducer as close to the center of the boat as possible.
- DO NOT mount the Intelliducer in locations where it might be jarred when launching, hauling, or storing.
- DO NOT mount the Intelliducer in the path of the propeller on single-drive boats. The Intelliducer can cause cavitation that can degrade the performance of the boat and damage the propeller. On twin-drive boats, mount the Intelliducer between the drives, if possible.



**NOTE:** DO NOT mount the Intelliducer behind strakes, struts, fittings, water intake or discharge ports, or anything that creates air bubbles or causes the water to become turbulent. The Intelliducer must be in clean (non-turbulent) water for optimal performance.

## To mount the Intelliducer on a transom:

1. Position the Intelliducer mount at the selected transom location. Make sure the Intelliducer is parallel with the water line. Mark the center locations of each hole on the Intelliducer mount.



2. Drill  $\frac{5}{32}$  in. (4 mm) pilot holes approximately 1 in. (25 mm) deep at the marked locations. To avoid drilling the holes too deep, wrap a piece of tape around the bit at 1 in. (25 mm) from the point of the bit.
3. Apply marine sealant to the 5 × 30 mm screws. Attach the Intelliducer assembly to the transom using the 5 × 30 mm screws. Adjust the Intelliducer assembly to extend beyond the bottom of the transom approximately  $\frac{1}{8}$  in. (3.2 mm) on fiberglass hulls or  $\frac{3}{8}$  in. (9.5 mm) on aluminum hulls. Adjust the Intelliducer assembly to be aligned parallel with the water.
4. Tighten the 10-32 locking nut until it touches the mounting bracket, and then tighten  $\frac{1}{4}$  turn more. (Do not overtighten.)
5. Place the first cable clamp on the Intelliducer cable, approximately one third of the distance between the Intelliducer and the top of the transom.
6. Mark the location. Drill a  $\frac{1}{8}$  in. (3.2 mm) pilot hole approximately  $\frac{3}{8}$  in. (9.5 mm) deep.
7. Attach the cable clamp using one of the 4 × 12 mm screws. Coat the screw with marine sealant before installation. Repeat steps 5 and 6 using the other cable clamp.
8. Route the NMEA 2000 cable to the backbone of your existing NMEA 2000 network.  
OR  
Route the power/data cable to power and a NMEA 0183-compliant device.



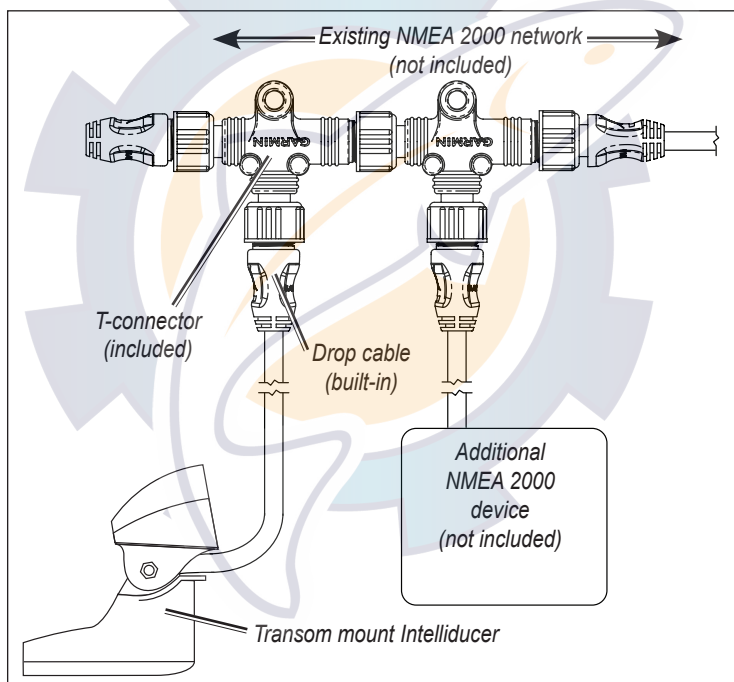
**CAUTION:** Avoid routing the cable close to electrical wires or other sources of electrical interference.

## Step 3 (NMEA 2000): Connect the Intelliducer to a NMEA 2000 Network

The Intelliducer is packaged with a NMEA 2000 T-connector. The Intelliducer has a built-in NMEA 2000 drop cable. Use these two components to connect the Intelliducer to your existing NMEA 2000 network. If you do not have an existing NMEA 2000 network, you will need to install a NMEA 2000 network on your boat. For more information on NMEA 2000, visit [www.garmin.com](http://www.garmin.com).

### To connect the Transom Mount Intelliducer to your existing NMEA 2000 network:

1. Determine an appropriate location to connect the Intelliducer to your existing NMEA 2000 backbone.
2. Disconnect one side of a NMEA 2000 T-connector, or disconnect a terminator from the backbone nearest to the location where you want to connect the Intelliducer.  
If you need to extend the NMEA 2000 backbone, connect an appropriate NMEA 2000 backbone extension cable (not included) to the T-connector or terminator you disconnected.
3. Connect the included T-connector for the Intelliducer in the NMEA 2000 backbone.
4. Route the built-in drop cable on the Intelliducer to the bottom of the T-connector you added to your NMEA 2000 network.

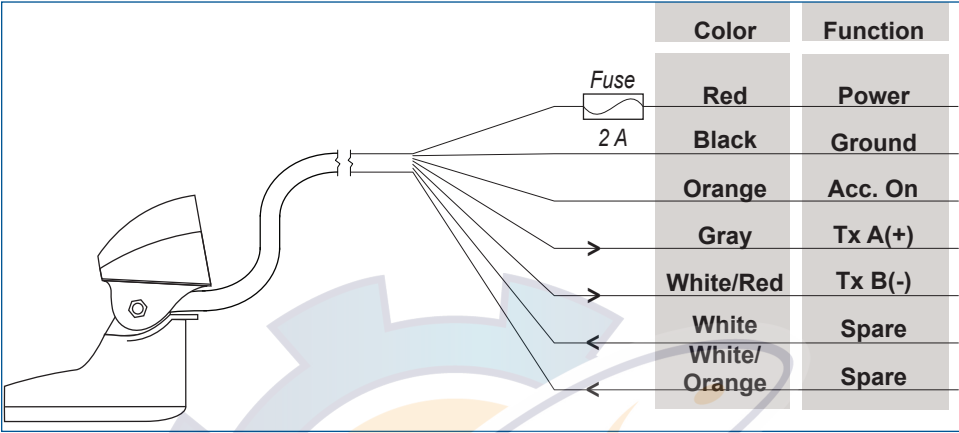


**Connecting the Intelliducer to a NMEA 2000 Network**

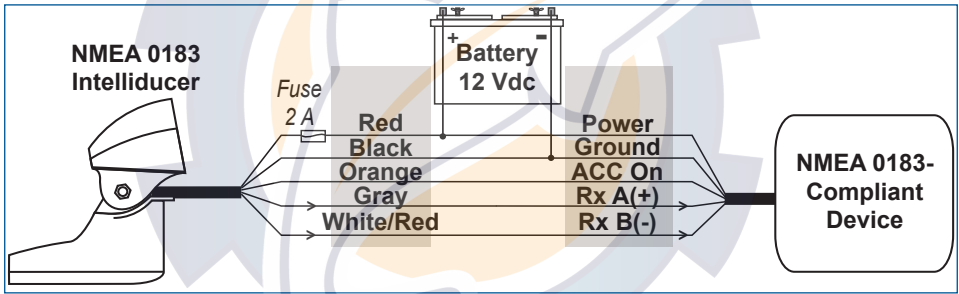
Step 3 (NMEA 0183): Connect the Intelliducer to Power and a NMEA 0183-compliant Device

The Transom Mount NMEA 0183 Intelliducer must be connected to power. Use the diagrams to correctly wire the Intelliducer. In the diagrams, Tx = transmit, and Rx = receive.

You can connect up to three NMEA 0183-compliant devices to receive data from one Intelliducer.



Transom Mount NMEA 0183 Intelliducer Power/Data Cable



Transom Mount NMEA 0183 Intelliducer Wired to a NMEA 0183-compliant Device

Exceptions:

- If your NMEA 0183-compliant device has only one receiving wire (Rx), connect it to the gray wire (Tx A) from the Intelliducer, and leave the white/red wire (Tx B) from the Intelliducer unconnected.



**NOTE:** The orange (accessory on) wire is used when wiring the Intelliducer to a Garmin chartplotter or other NMEA 0183 device that has a defined accessory signal wire. If you are wiring the Intelliducer to a device that does not have an accessory signal wire, the orange wire from the Intelliducer should be connected to ground.



**CAUTION:** If you are wiring the Intelliducer to a device that does not have an accessory signal wire, connect the Intelliducer power wire to the ignition or install an in-line switch. The Intelliducer can drain the boat battery if it is not switched.

## Step 4: Update Your Chartplotter

If you are using the Intelliducer with an existing Garmin chartplotter, upgrade your Garmin chartplotter with the latest software to ensure compatibility with the Intelliducer. For more information, visit [www.garmin.com](http://www.garmin.com).

## Specifications

### Physical

<b>Unit Dimensions:</b>	2 <sup>5</sup> / <sub>8</sub> in. (66 mm) W × 2 <sup>1</sup> / <sub>4</sub> in. (70.4 mm) H × 4 <sup>7</sup> / <sub>16</sub> in. (113.2 mm) D
<b>Weight:</b>	22 oz. (624 g)
<b>Cables:</b>	NMEA 2000: 19 ft. 8 in. (6 m) NMEA 0183 power/data: 29 ft. 6 in. (9 m)
<b>Temperature range:</b>	From -15°C to 33°C (From 5°F to 91°F)
<b>Case Material:</b>	ASA Plastic

### Power

<b>Power input source:</b>	NMEA 2000 — 9–16 Vdc NMEA 0183 — 9–33 Vdc
<b>Fuse:</b>	2 A
<b>Main power usage:</b>	2 W max
<b>NMEA 2000 LEN:</b>	4

### Sonar

<b>Power:</b>	150 W (RMS), 1,200 W (peak-to-peak)
<b>Frequency:</b>	160 kHz
<b>Depth:</b>	900 ft. (275 m) (Depth capacity is dependent on water salinity, bottom type, and other water conditions.)

## NMEA 2000 PGN Information

The Transom Mount NMEA 2000 Intelliducer transmits the following PGN information across your NMEA 2000 network:

059392	ISO Acknowledgement
060928	ISO Address Claim
126208	NMEA–Command/Request/Acknowledge Group Function
126464	Transmit/Receive PGN List Group Function
126996	Product Information
128267	Water Depth
130312	Temperature



Garmin Intelliducers are NMEA 2000 certified

## NMEA 0183 Information

The Transom Mount NMEA 0183 Intelliducer communicates with NMEA 0183 devices using the SDDPT, SDDBT, and SDMTW NMEA 0183 sentences.

## Software License Agreement

BY USING THE INTELLIDUCER, YOU AGREE TO BE BOUND BY THE TERMS AND CONDITIONS OF THE FOLLOWING SOFTWARE LICENSE AGREEMENT. PLEASE READ THIS AGREEMENT CAREFULLY.

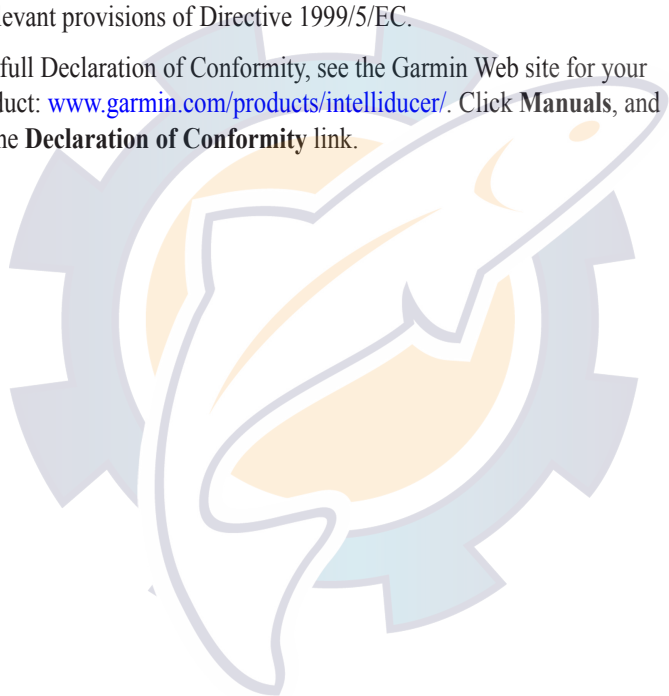
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## Declaration of Conformity (DoC)

Hereby, Garmin, declares that this Intelliducer is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.

To view the full Declaration of Conformity, see the Garmin Web site for your Garmin product: [www.garmin.com/products/intelliducer/](http://www.garmin.com/products/intelliducer/). Click **Manuals**, and then select the **Declaration of Conformity** link.





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