Garmin 010-11927-22

Garmin Airmar B150M Thru-Hull Mount Transducer User Manual

Model: 010-11927-22

P̲RODUCT O̲VERVIEW

Image: Garmin Airmar B150M Thru-Hull Mount Transducer, bronze color.

The Garmin Airmar B150M is an 8-pin, 300 W bronze thru-hull mount transducer designed to provide depth capability and target separation for marine navigation and fishing applications. It operates within a CHIRP frequency range, offering enhanced sonar performance. This transducer is engineered for reliable performance in various marine environments.

Package Contents

Verify that all items are present in the package before proceeding with installation.

- Garmin Airmar B150M Thru-Hull Mount Transducer with 20 Degree Tilt
- Installation Instructions (separate document)

Specifications

Brand	Garmin
Model Number	010-11927-22
Mounting Type	Thru-Hull Mount
Deadrise	16 to 24 degrees (integrated 20 degree tilt)
Operating Frequency	95-155 kHz (CHIRP)
Power (RMS)	300 W
Beamwidth	26/17 degrees
Maximum Depth	600 ft (183 m)
Cable Length	*(Information not provided, refer to product packaging)*
Connector	8-pin
Color	Bronze
Item Weight	2.2 pounds (1 kg)
Product Dimensions	10.16"L x 7.87"W x 4.45"H

Setup and Installation

Proper installation of the thru-hull transducer is critical for optimal performance and to prevent damage to your vessel. This section provides general guidelines. **Always refer to the detailed installation instructions provided with your transducer kit for specific steps and safety precautions.**

Pre-Installation Considerations:

- **Location Selection:** Choose a mounting location on the hull that is free from turbulence, air bubbles, and obstructions. The transducer should be in clean, undisturbed water flow.
- **Hull Material:** Ensure your hull material is compatible with a bronze thru-hull transducer.
- **Deadrise Angle:** The B150M features a 20-degree tilt element, designed for hulls with a deadrise between 16 and 24 degrees, allowing the transducer to be mounted flush with the hull bottom for optimal beam alignment.
- **Tools and Materials:** Gather all necessary tools and materials as specified in the detailed installation guide, which typically include drills, sealants, and fasteners.

General Installation Steps:

1. **Drill Pilot Hole:** Carefully mark and drill a pilot hole from inside the hull, ensuring it is perpendicular to the waterline.
2. **Cut Mounting Hole:** Use a hole saw of the specified diameter to cut the main mounting hole through the hull.
3. **Prepare Surfaces:** Clean and prepare the hull surfaces around the hole, both inside and outside, ensuring they are smooth

and free of debris.

4. **Apply Sealant:** Apply marine-grade sealant generously to the transducer's flange and threads to ensure a watertight seal.

5. **Insert Transducer:** Insert the transducer through the hull from the outside.

6. **Secure Transducer:** From inside the hull, place the washer and nut onto the transducer's shaft and tighten securely, ensuring the transducer is properly aligned.

7. **Connect Cable:** Route the transducer cable to your compatible sonar unit, ensuring it is protected from abrasion and interference. Connect the 8-pin connector to the sonar unit.

8. **Test Installation:** After installation, perform a water test to check for leaks and verify proper operation of the transducer with your sonar unit.

Caution: Improper installation can lead to water ingress, damage to your boat, or poor transducer performance. If you are unsure about any step, consult a qualified marine technician.

OPERATION

The Garmin Airmar B150M transducer functions as the underwater sensor for your compatible Garmin sonar or fishfinder unit. It transmits and receives sonar signals to detect depth, bottom structure, and fish targets.

Key Operational Aspects:

- **CHIRP Technology:** This transducer utilizes CHIRP (Compressed High-Intensity Radiated Pulse) technology, which sweeps a range of frequencies (95-155 kHz) to provide clearer, higher-resolution sonar images and better target separation compared to traditional fixed-frequency transducers.

- **Depth Capability:** Capable of reading depths up to 600 feet (183 meters) under ideal conditions. Actual depth performance may vary based on water conditions, bottom type, and sonar unit settings.

- **Beamwidth:** The 26/17 degree beamwidth provides a good balance between coverage and detail, suitable for a variety of fishing and navigation scenarios.

- **Compatibility:** Ensure your sonar unit is compatible with an 8-pin, 300W CHIRP transducer operating in the 95-155 kHz frequency range. Refer to your sonar unit's manual for compatibility details.

The transducer itself does not have user-operable controls; its function is managed entirely by the connected sonar display unit. Refer to your sonar unit's user manual for instructions on adjusting settings, interpreting sonar returns, and utilizing features like depth alarms or fish symbols.

MAINTENANCE

Regular maintenance helps ensure the longevity and optimal performance of your transducer.

- **Cleaning:** Periodically inspect the transducer's face for marine growth, dirt, or debris. Clean gently with a soft cloth and mild soap and water. Avoid abrasive cleaners or tools that could scratch the transducer surface.

- **Inspect Cable:** Check the transducer cable for any signs of wear, cuts, or kinks. Ensure the cable is securely routed and protected from sharp edges or excessive bending.

- **Inspect Mounting:** Verify that the transducer is still securely mounted to the hull and that the sealant around the thru-hull fitting is intact and shows no signs of degradation or leaks.

- **Winterization:** If storing your boat in freezing temperatures, ensure any water inside the thru-hull fitting or cable conduit is drained to prevent ice damage.

TROUBLESHOOTING

If you experience issues with your transducer, consider the following common troubleshooting steps. For more detailed diagnostics, refer to your sonar unit's manual or contact Garmin support.

- **No Depth Reading or Intermittent Readings:**

- Check all cable connections between the transducer and the sonar unit. Ensure they are secure and free of corrosion.
    - Inspect the transducer face for marine growth, air bubbles, or damage. Clean as necessary.
    - Verify the transducer is properly submerged and not experiencing aeration (air bubbles passing over the face, often caused by hull design or speed).
    - Check sonar unit settings (e.g., frequency, gain, range) to ensure they are appropriate for current conditions.

- **Poor Target Separation or Cluttered Screen:**

    - Adjust the gain or sensitivity settings on your sonar unit.
    - Ensure there are no electrical interferences from other onboard electronics.
    - Verify the transducer is mounted correctly and not picking up interference from the boat's hull or propulsion system.

- **Incorrect Temperature Reading (if applicable):**

    - Ensure the temperature sensor (if integrated) is clean and fully submerged.
    - Check cable connections.

WARRANTY INFORMATION

Garmin products are typically covered by a limited warranty. For specific warranty terms, conditions, and duration applicable to your Garmin Airmar B150M transducer, please refer to the warranty card included with your product or visit the official Garmin website. Retain your proof of purchase for warranty claims.

CUSTOMER SUPPORT

For technical assistance, product inquiries, or service, please contact Garmin Customer Support. You can find contact information, FAQs, and additional resources on the official Garmin website:

www.garmin.com/support

When contacting support, please have your product model number (010-11927-22) and serial number (if applicable) ready.
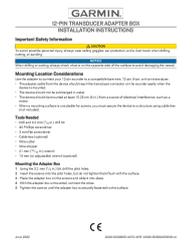
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Related Documents - 010-11927-22

	[Garmin 12-Pin Transducer Adapter Box Installation Instructions](#) Comprehensive guide for installing the Garmin 12-pin transducer adapter box, detailing safety precautions, mounting considerations, tools required, and step-by-step instructions for connecting various Garmin and Airmar transducers.

[Garmin 12-Pin Transducer Adapter Box Installation Instructions](#)

This document provides installation instructions for the Garmin 12-Pin Transducer Adapter Box, including important safety information, mounting considerations, and wiring details for connecting various Garmin and Airmar transducers.

[Garmin Transducer Selection Guide: Choose the Right Sonar Technology](#)

Comprehensive guide to selecting the optimal Garmin transducer for your marine electronics. Explore sonar technologies like LiveScope, Panoptix, CHIRP, and UHD, along with mounting options and detailed product specifications.

[Garmin Transducer Placement Guide: Optimal Installation for Marine Sonar](#)

Learn how to properly install Garmin marine transducers (transom-mount, thru-hull, in-hull) for optimal sonar performance. This guide covers placement considerations, interference reduction, hull types, and accessories.

[Garmin Transom/Electric Trolling Motor Transducer Installation Instructions](#)

This document provides detailed installation instructions for Garmin transom-mount and electric trolling motor transducers. It includes safety information, preparation steps, mounting procedures, and technical specifications for optimal performance.

[Garmin 8-Pin Transducer Adapter Box Installation Instructions](#)

Detailed installation guide for the Garmin 8-Pin Transducer Adapter Box, including safety precautions, mounting instructions, wiring diagrams, and compatibility tables for various Garmin and Airmar transducers.