Garmin 010-02087-00

Garmin AIS 800 Class B Transceiver User Manual

Model: 010-02087-00

1. Introduction

The Garmin AIS 800 is a Class B Automatic Identification System (AIS) transceiver designed to enhance situational awareness and collision avoidance on the water. It transmits your vessel's information, such as position, speed, and course, to other AIS-equipped vessels and receives their information, displaying it on compatible chartplotters or MFDs. This manual provides essential information for the proper installation, operation, and maintenance of your AIS 800.



Figure 1: The Garmin AIS 800 Class B Transceiver. This image displays the compact black casing of the Garmin AIS 800 Class B Transceiver. The top panel features the Garmin logo and product information, while the front panel includes three coaxial connectors for antenna inputs.

2. Safety Information

Please read all safety warnings and instructions carefully before operating the device. Failure to do so may result in personal injury, damage to the device, or poor product performance.

- **Installation:** Ensure all electrical connections are made correctly and securely to prevent damage or fire. Consult a qualified marine electronics installer if you are unsure about any part of the installation process.
- **Antenna Placement:** Position the GPS antenna with a clear view of the sky to ensure optimal satellite reception.
- **MMSI Programming:** The AIS 800 requires programming with your vessel's unique Maritime Mobile Service Identity (MMSI) number. This is a critical step for legal and proper operation. Incorrect programming can lead to regulatory non-compliance.
- **Navigation Aid:** The AIS 800 is an aid to navigation and should not be used as the sole means of navigation. Always use appropriate navigation practices and maintain a proper lookout.

3. Setup

3.1 Mounting Considerations

The AIS 800 is designed for panel or dashboard mounting. Choose a location that is dry, well-ventilated, and provides easy access for wiring and maintenance. Ensure there is sufficient space around the unit for proper heat dissipation.

- Mount the unit securely using appropriate fasteners.
- Avoid mounting near strong magnetic fields or sources of electrical interference.

3.2 Electrical Connections

Connect the AIS 800 to your vessel's power supply, VHF antenna, and NMEA 2000 network.

- **Power:** Connect the power cable to a 12 Vdc or 24 Vdc power source. Ensure the circuit is protected by an appropriate fuse.
- **VHF Antenna:** Connect your VHF antenna to the AIS 800. The unit features an internal VHF antenna splitter, allowing a single VHF antenna to be shared with your VHF radio.
- **GPS Antenna:** The AIS 800 has a built-in GPS receiver. For optimal performance, an optional external GPS antenna (e.g., Garmin GA 38) can be connected, especially if the unit's mounting location obstructs satellite signals.
- **NMEA 2000:** Connect the AIS 800 to your vessel's NMEA 2000 backbone. This allows the AIS data to be shared with compatible chartplotters, MFDs, and other marine electronics.

3.3 Initial Configuration and MMSI Programming

Before the AIS 800 can transmit, it must be programmed with your vessel's unique MMSI number. This programming typically requires specific Garmin software and a computer connection. It is often recommended to have this done by a certified Garmin dealer or marine electronics technician to ensure correct setup and compliance with regulations.

- Obtain your vessel's MMSI number from the appropriate regulatory authority.
- Use the Garmin AIS programming software to enter the MMSI and other vessel details.
- Verify that the programming was successful and the unit is transmitting correctly.

4. Operating the AIS 800

4.1 Powering On and Off

The AIS 800 powers on automatically when connected to a power source. There is no manual power button on the unit itself. To power off, disconnect the power supply or switch off the circuit breaker connected to the unit.

4.2 AIS Data Display

Once powered on and configured, the AIS 800 will begin receiving and transmitting AIS data. This information is then sent via the NMEA 2000 network to your compatible chartplotter or MFD, where it can be displayed as vessel icons, target lists, and collision avoidance warnings.

- Refer to your chartplotter's manual for instructions on how to display and interpret AIS data.
- Ensure your chartplotter is configured to receive AIS data from the NMEA 2000 network.

4.3 Status Indicators

The AIS 800 features LED indicators that provide visual feedback on its operational status. Consult the full product manual for a detailed explanation of each LED's meaning (e.g., power, transmit, receive, error).

5. Maintenance

The Garmin AIS 800 is designed for reliable operation with minimal maintenance. Regular inspection and cleaning will help ensure its longevity and performance.

- **Cleaning:** Wipe the unit with a damp cloth. Do not use abrasive cleaners or solvents.
- **Connections:** Periodically check all cable connections for corrosion or looseness. Ensure antenna connections are tight.
- **Software Updates:** Garmin may release software updates to improve performance or add features. Check the Garmin website for the latest firmware and instructions on how to update your device.

6. Troubleshooting

This section addresses common issues you might encounter with your AIS 800.

Problem	Possible Cause	Solution
No power to unit	Loose power connection, blown fuse, no power from source.	Check power cable connections. Inspect and replace fuse if necessary. Verify power at the source.
No AIS targets displayed on chartplotter	NMEA 2000 connection issue, chartplotter not configured for AIS, no AIS traffic in area.	Verify NMEA 2000 network is functioning. Check chartplotter settings to ensure AIS data reception is enabled. Confirm there are other AIS-equipped vessels nearby.
"Low position accuracy" or GPS error message	Poor GPS signal, internal GPS antenna obstructed, external GPS antenna not connected or faulty.	Ensure the unit or external GPS antenna has a clear view of the sky. Check external GPS antenna connection. If using internal GPS, consider adding an external GA 38 antenna.
Unit not transmitting AIS data	MMSI not programmed, incorrect MMSI, faulty VHF antenna connection, unit error.	Confirm MMSI has been correctly programmed. Check VHF antenna and cable connections. Consult Garmin support if issue persists.

Problem	Possible Cause	Solution
Software update issues	Corrupted download, incorrect update procedure, compatibility issues.	Ensure stable internet connection during download. Follow Garmin's specific update instructions precisely. Contact Garmin support for assistance with persistent update problems.

7. Specifications

Key technical specifications for the Garmin AIS 800 Class B Transceiver:

Feature	Detail
Model Name	010-02087-00
Item Dimensions (LxWxH)	8.7 x 2.5 x 5.5 inches
Item Weight	3 Pounds
Material	Plastic
Color	Black
Connectivity Technology	NMEA 2000
Special Features	NMEA 2000 Connectivity, Internal VHF Antenna Splitter, Built-in GPS with Optional External Antenna
Mounting Type	Panel Mount or Dashboard Mount
Suggested Users	Boating

8. Warranty Information

The Garmin AIS 800 Class B Transceiver comes with a**1-year limited warranty** from the date of purchase. This warranty covers defects in materials and workmanship under normal use. For full terms and conditions, please refer to the warranty statement included with your product or visit the official Garmin website.
Please retain your proof of purchase for warranty claims.

9. Customer Support

For technical assistance, troubleshooting beyond this manual, or warranty inquiries, please contact Garmin Customer Support:

- **Garmin Support Website:** Visit www.garmin.com/support for FAQs, manuals, software updates, and contact options.
- **Phone Support:** Refer to the Garmin website for regional phone numbers and operating hours.

When contacting support, please have your product model (010-02087-00) and serial number ready.

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Ask a question about this manual

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

Name

Anonymous

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After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. Privacy details.

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question