Garmin 010-01142-30

Garmin GNX Wind Instrument User Manual

Comprehensive guide for your Garmin GNX Wind marine instrument.

1. Introduction

The Garmin GNX Wind marine instrument is designed to provide accurate and reliable wind data for sailboats, particularly those in the 20- to 40-foot range. This instrument is an excellent choice for upgrading older systems or installing a new wind system onboard.
Key features include:

- Glass-bonded backlit monochrome LCD display for clear visibility and fog prevention.
- Large, easy-to-read black digits on white or customizable background colors for high contrast.
- Simultaneous display of true and apparent wind data, Steer Pilot, and boat speed.
- Displays true and apparent wind speed and angles, true wind direction, boat speed, speed over ground, VMG, heading, course over ground, and closed haul.
- NMEA 2000 network and ANT technology interfaces for seamless integration.

2. What's in the Box

Upon unpacking your Garmin GNX Wind instrument, ensure all components are present:

- GNX Wind Instrument
- Trim piece snap cover
- Protective cover
- Flush mount gasket and hardware
- NMEA 2000® T-connector
- NMEA 2000 drop cable
- Installation instructions

- Documentation



Figure 2.1: The Garmin GNX Wind instrument, showing its clear display and control buttons.

3. Setup and Installation

Proper installation is crucial for the optimal performance of your GNX Wind instrument. This device is designed for panel mounting.

3.1. Mounting the Device

1. Choose a suitable location on your boat's panel that is easily visible and accessible.
2. Use the provided flush mount gasket as a template to mark the cutout area.
3. Carefully cut the opening in the panel.
4. Insert the GNX Wind instrument into the cutout.
5. Secure the device using the supplied mounting hardware.
6. Attach the trim piece snap cover for a finished look.

3.2. Power and Network Connection

The GNX Wind instrument connects to your boat's network via NMEA 2000.

1. Connect the NMEA 2000 drop cable to the port on the back of the GNX Wind instrument.
2. Connect the other end of the drop cable to an available NMEA 2000 T-connector on your boat's NMEA 2000 backbone.
3. Ensure your NMEA 2000 network is properly terminated and powered.

For wireless connectivity, the device also supports ANT technology, allowing it to interface with other compatible Garmin marine devices.

4. Operating the GNX Wind Instrument

The GNX Wind instrument features a user-friendly interface with physical buttons for navigation and data display. The large, backlit LCD ensures readability in various lighting conditions.

4.1. Display Modes and Data Fields

The instrument can display a variety of wind and boat data. It typically shows two data fields simultaneously along with a digital wind rose.

- **True Wind Speed (TRU):** The actual speed of the wind relative to the ground.
- **Apparent Wind Speed (AWS):** The wind speed felt on the boat, influenced by boat speed.
- **Boat Speed (BSP):** Your vessel's speed through the water.
- **Velocity Made Good (VMG):** The speed at which your boat is moving directly towards a waypoint or upwind/downwind.
- **True Wind Direction (TWD):** The direction from which the true wind is blowing.
- Other data includes heading, course over ground, and closed haul.



Figure 4.1: Display showing Boat Speed (BSP) and wind angle, useful for navigation.



Figure 4.2: Display showing Velocity Made Good (VMG) and True Wind Direction (TWD), critical for sailing performance.

4.2. Button Functions

The instrument features several buttons for control:

- **Power Button:** Turns the device on/off.
- **Menu Button:** Accesses settings and configuration options.
- **Up/Down Arrows:** Navigate through menus or adjust settings.
- **Back/Return Button:** Returns to the previous screen or menu.

4.3. Customization

You can customize the background colors of the display for optimal viewing in different light conditions. Refer to the on-screen menu for display settings.

5. Maintenance

Regular maintenance ensures the longevity and accuracy of your GNX Wind instrument.

5.1. Cleaning

- Clean the display and casing with a soft, clean, damp cloth.
- Do not use abrasive cleaners or solvents, as they can damage the display and plastic components.
- Avoid spraying water directly onto the device.

5.2. Software Updates

Garmin periodically releases software updates to improve performance and add new features. It is recommended to keep your device's software up to date. Visit the Garmin website or use Garmin Express for update instructions.

6. Troubleshooting

If you encounter issues with your GNX Wind instrument, refer to the following common problems and

solutions:

Problem	Possible Cause	Solution
Device does not power on.	No power from NMEA 2000 network; loose cable connection.	Check NMEA 2000 network power and cable connections. Ensure network is properly terminated.
No wind data displayed.	Wind sensor not connected or faulty; NMEA 2000 communication issue.	Verify wind sensor connection to the NMEA 2000 network. Check network for other device communication.
Incorrect data readings.	Calibration needed; sensor obstruction; software issue.	Perform a calibration of the wind sensor if applicable. Check for physical obstructions. Update device software.

If the problem persists, contact Garmin customer support for further assistance.

7. Specifications

Detailed technical specifications for the Garmin GNX Wind instrument (Model: 010-01142-30):

- **Product Dimensions:** 11.02 x 11.02 x 11.02 inches
- **Item Weight:** 1.78 pounds (0.81 Kilograms)
- **Item Model Number:** 010-01142-30
- **Connectivity Technologies:** Bluetooth, NMEA 2000, ANT
- **Screen Size:** 4 Inches
- **Color:** Black
- **Human Interface Input:** Buttons
- **Mounting Type:** Panel Mount
- **Vehicle Service Type:** Sailboat
- **Manufacturer:** Garmin
- **First Available Date:** April 22, 2016

8. Warranty and Support

Garmin products are built to high standards and come with a limited warranty. For specific warranty terms and conditions, please refer to the documentation included with your product or visit the official Garmin website. For technical support, product registration, or to download the latest software updates and detailed manuals, please visit the Garmin support website:

www.garmin.com/support

When contacting support, please have your product model number (010-01142-30) and serial number ready.