

# **GND<sup>™</sup> 10 Installation Instructions**

This device bridges the connection between Nexus<sup>®</sup> network devices and a NMEA 2000<sup>®</sup> network. When the device is connected to a computer using the included USB cable, you can calibrate advanced wind transducers such as the gWind Race<sup>™</sup> using the NexusRace<sup>™</sup> software, and you can use data from the transducers with programs such as Expedition<sup>®</sup> and Adrena.

## **Important Safety Information**

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

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To avoid possible personal 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 to avoid damaging the vessel.

## **Mounting Considerations**

#### NOTICE

This device should be mounted in a location that is not exposed to extreme temperatures or conditions. The temperature range for this device is listed in the product specifications. Extended exposure to temperatures exceeding the specified temperature range, in storage or operating conditions, may cause device failure. Extreme-temperature-induced damage and related consequences are not covered by the warranty.

When selecting a mounting location, observe these considerations.

- To avoid interference with a magnetic compass, the device should not be installed closer to a compass than the compass-safe distance value listed in the product specifications.
- You can use the included screws to mount the device on your boat. If the included screws are not appropriate for the mounting surface, suitable hardware must be purchased separately.

## **Mounting the Device**

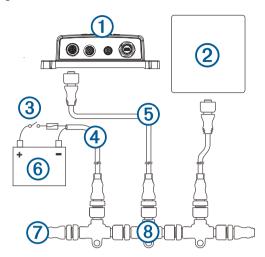
- 1 Determine the mounting location.
- **2** Using the device as a template, mark the two pilot hole locations on the mounting surface.
- **3** Using a <sup>1</sup>/<sub>8</sub> in. (3 mm) bit, drill the pilot holes.
- **4** Use the included screws to attach the device to the mounting surface.

## **Connection Considerations**

### **NMEA 2000 Connection Considerations**

This device connects to a NMEA 2000 network on your boat to share information from connected Nexus network devices.

If you are unfamiliar with NMEA 2000, you should read the "NMEA 2000 Network Fundamentals" chapter of the *Technical Reference for NMEA 2000 Products*. To download this document, select Manuals on the product page for your device at www.garmin.com.

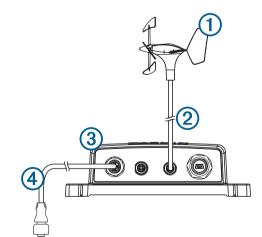


Item	Description
1	GND 10 device
2	Garmin <sup>®</sup> marine instrument
3	Ignition or in-line switch
4	NMEA 2000 power cable
5	NMEA 2000 drop cable
6	12 Vdc power source
0	NMEA 2000 terminator or backbone cable
8	NMEA 2000 T-connector

### **Nexus Connection Considerations**

You must connect a Nexus network device to one of the NEXUS ports.

**NOTE:** If you connect devices in addition to a gWind<sup>™</sup> sensor on the Nexus network, you must provide a separate power supply connected directly to the Nexus power terminals.



#### Item Description

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- (1) Nexus network device, such as a gWind sensor
- (2) Included Nexus mast cable with a field-installable connector.

Item	Description
3	GND 10
4	NMEA 2000 drop cable

### Connecting to a Computer

When the device is connected to a computer using the included USB cable, you can calibrate advanced sensors such as the gWind Race using the NexusRace software. You can also use data from connected wind transducers with third-party sailing programs such as Expedition and Adrena.

- 1 Connect the included USB cable to the USB port on the device.
- 2 Connect the other end of the USB cable to an open USB port on your computer.

The LED near the USB port flashes green when the device is correctly connected to your computer.

The correct driver should be installed automatically by the Windows<sup>®</sup> operating system.

- **3** If the correct driver is not installed automatically, download and install the driver from www.garmin.com.
- 4 After the device is connected correctly to the computer, download the NexusRace software from www.garmin.com and install it.

## **Status LEDs**

The status LEDs are located on the product label near the ports and can help with troubleshooting.

NMEA 2000 Status LED Color and Activity	Status
Off	There is no power over the NMEA 2000 network.
Solid red	The device is turning on.
Flashing green	The device is operating properly.
Flashing orange	The device software is being updated.
Flashing red	The device has encountered an error. For assistance, go to support.garmin.com.

NEXUS and USB Status LED Color and Activity	Status
Flashing green	The connected device is operating properly.
Flashing orange	The connected device is initializing.
Flashing red	The connected device has encountered an error. For assistance, go to support.garmin.com.

## **Specifications**

Specification	Measurement
Dimensions (H×W×D)	170 x 90 x 50 mm (6.7 x 3.5 x 2 in.)
Weight	196 g (6.9 oz.)
Temperature range	From 5° to 158°F (from -15° to 70°C)
Compass-safe distance	10 cm (3.9 in.)
Waterproof rating	IPX7 <sup>1</sup>
NMEA 2000 power draw	1.1 W maximum
NMEA 2000 input voltage	From 9 to 16 Vdc
NMEA 2000 LEN @ 9 Vdc	4

### NMEA 2000 PGN Information

#### Transmit

PGN	Description
126464	Transmit and receive PGN list group function
126996	Product information

### Receive

PGN	Description
065240	Commanded address
127258	Magnetic variance

#### **Transmit and Receive**

PGN	Description
059392	ISO acknowledgment
059904	ISO request
060928	ISO address claimed
126208	Request group function
126993	Heartbeat
127250	Vessel heading
127257	Attitude
128259	Speed: Water referenced
128267	Water depth
129026	COG and SOG : Rapid update
129029	GNSS position data
129540	GNSS satellites in view
130306	Wind data
130310	Environmental parameters
130311	Environmental parameters
130312	Temperature
130314	Actual pressure
130316	Temperature: Extended range

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Expedition® is a registered trademark of Primavera Systems, Inc..

<sup>&</sup>lt;sup>1</sup> The device withstands incidental exposure to water of up to 1 m for up to 30 min. For more information, go to www.garmin.com/waterrating.