

gWind Race™ Installation Instructions

This wind transducer provides wind speed and wind angle information to a NMEA 2000® network on your boat. A Garmin® GND™ 10 must be used to send data from this device to a NMEA 2000 network.

Important Safety Information

⚠ WARNING

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

⚠ CAUTION

Always wear safety goggles, ear protection, and a dust mask when drilling, cutting, or sanding.

Use caution when working from heights.

Registering Your Device

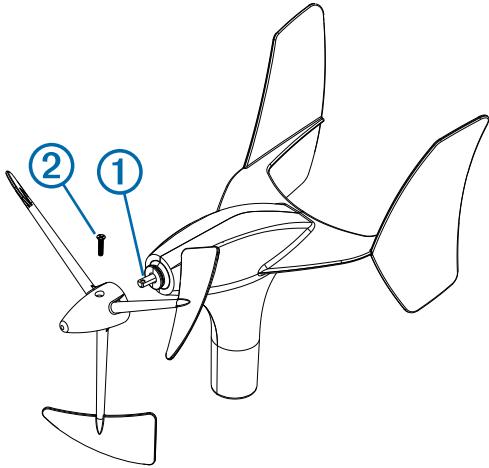
Help us better support you by completing our online registration today.

- Go to <http://my.garmin.com>.
- Keep the original sales receipt, or a photocopy, in a safe place.

Installing the Propeller

- 1 Ensure the shaft ① lines up correctly with the slot on the propeller.

The socket on the propeller fits only one way on the shaft.



- 2 Press on the propeller until it is seated on the device.
- 3 Install the set screw ② to hold the propeller securely to the device.

Mounting Considerations

When selecting a mounting location for the wind transducer, observe these considerations.

- The wind transducer can be installed in either a pre-existing pole mount on your mast, or in the included mounting bracket.
- If you are installing the included mounting bracket, it should be mounted on a horizontal surface on the mast head.
- If there is not a horizontal surface on the mast head, an appropriate shim must be added to create a horizontal surface.
- The wind transducer should be installed with the cable facing the front of the boat, parallel to the center line.

NOTE: If you do not mount the device with the cable facing the exact front of the boat, you must configure the orientation to receive accurate wind-angle data ([Adjusting the Orientation, page 3](#)).

Installing the Mounting Bracket

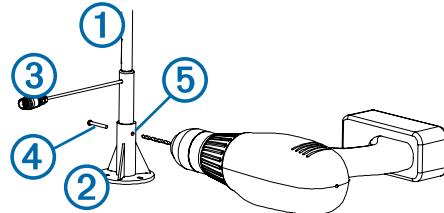
The included bracket can be used to mount the device if you do not have a pole mount pre-installed on your mast.

- 1 Using the mounting bracket as a template, mark the pilot hole locations.
- 2 Using a 4.5 mm (11/64 in.) bit, drill the pilot holes.
- 3 Fasten the mounting bracket to the surface using the included screws.

Securing the Device in the Mounting Bracket

The included bracket can be used to mount the device if you do not have a pole mount pre-installed on your mast.

- 1 Slide the pole ① into the mounting bracket ②, and turn it until the cable ③ points toward the front of the boat, parallel to the center line.

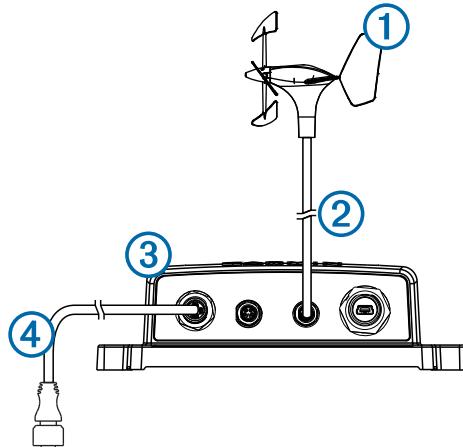


NOTE: If you do not mount the device with the cable facing the front of the boat, exactly parallel to the center line, or if you mount the device with the cable facing the back of the boat, you must configure the orientation to receive accurate wind-angle data ([Adjusting the Orientation, page 3](#)).

- 2 Holding the pole securely, use a 5.5 mm (7/32 in.) bit to drill a hole halfway through the pole, drilling through the hole in one side of the mounting bracket.
- 3 Insert the included hex screw ④ through the hole you drilled in step 2. This holds the pole in place while you drill another hole.
- 4 Drill through the other half of the pole by drilling through the hole on the other side of the mounting bracket ⑤.
- 5 Push the hex screw completely through both holes and secure it using the included lock nut.

Connection Considerations

This device must connect to a Garmin GND 10 to communicate with the NMEA 2000 network on your boat.



| Item | Description |
|------|---|
| ① | gWind™ device |
| ② | Included Nexus® mast cable with a field-installable connector |
| ③ | GND 10 |
| ④ | NMEA 2000 network |

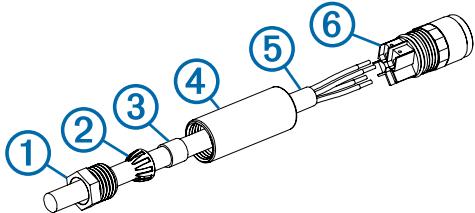
Nexus Connection Considerations

If you change from a Nexus wind sensor to the gWind sensor, you must move the mast cable from the wind port to the network port on the Nexus server on pins 5, 6, 7, and 8. The network server is NX2, and the classic server is BUS. See the Nexus device manual for more information.

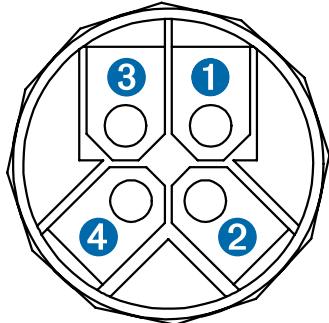
Installing the Nexus Field-Installable Connector

You must use the included field-installable connector to create the appropriate cable length for your installation.

- 1 Connect the finished end of the included bulk cable to the wind transducer on the mast.
- 2 Route the bare end of the cable to the location of the GND 10.
- 3 Leaving an appropriate amount of slack, cut the bare end of the wire, remove the casing, and strip the individual wires.
- 4 Disassemble the field-installable connector and place the pressing screw ①, pinch ring ②, seal ③, and sleeve ④ on the cable ⑤.



- 5 Using the screws on the back of the connector ⑥, connect each wire to the appropriate terminal.



| Terminal Number | Wire Color |
|-----------------|------------|
| ① | Green |
| ② | Yellow |
| ③ | Bare wire |
| ④ | White |

- 6 Screw the sleeve onto the connector.
- 7 Slide the seal into the sleeve and slide the pinch ring over the seal.
- 8 Screw the pressing screw into the sleeve to complete the assembly of the field-installable connector.
- 9 Connect the field-installable connector to either NEXUS port on the GND 10.

Configuring the Wind Transducer

Before you can configure the wind transducer, it must be connected through a GND 10 to a NMEA 2000 network with a

Garmin marine instrument, such as a GMI™ 20. Refer to the marine instrument owner's manual for more information on configuring NMEA 2000 devices.

- 1 On the marine instrument, go to the NMEA 2000 settings.
- 2 Select the name of the device (GND 10) to configure.

Adjusting the Orientation

You should adjust this setting if the sensor does not face the front of the boat, exactly parallel to the center line.

NOTE: The opening where the cable connects to the pole indicates the front of the sensor.

- 1 On the marine instrument, from the NMEA 2000 settings, select the device name (GND 10).
- 2 Select **Wind Angle Offset**.
- 3 Estimate the angle, in degrees clockwise around the mast, by which the sensor points away from the center of the front of the boat:
 - If the sensor is facing starboard, the angle should be between 1 and 180 degrees.
 - If the sensor is facing port, the angle should be between 181 and 360 degrees.
- 4 Select the angle observed in step 3.
- 5 Select **Done**.

Adjusting the Wind Angle Filter

You should adjust this setting to change the responsiveness of the display to changes in the wind direction.

- 1 On the marine instrument, from the NMEA 2000 settings, select the device name (GND 10).
- 2 Select **Wind Angle Filter**.
- 3 Select an option:
 - Select **Off** to turn off the filter and make the display the most responsive to changes in the wind angle.
 - Select **On** and adjust the value. Select a higher number to increase the responsiveness of the display to changes in the wind angle, or select a lower number to decrease the responsiveness.
 - Select **Auto** to automatically adjust the filter settings based on wind conditions.
- 4 Select **Done**.

Adjusting the Wind Speed Filter

You should adjust this setting to change the responsiveness of the display to changes in the wind speed.

- 1 On the marine instrument, from the NMEA 2000 settings, select the device name (GND 10).
- 2 Select **Wind Speed Filter**.
- 3 Select an option:
 - Select **Off** to turn off the filter and make the display the most responsive to changes in the wind speed.
 - Select **On** and adjust the value. Select a higher number to increase the responsiveness of the display to changes in the wind speed, or select a lower number to decrease the responsiveness.
 - Select **Auto** to automatically adjust the filter settings based on wind conditions.
- 4 Select **Done**.

Advanced Calibration

Advanced calibration tools are available for this device using a connected PC running the NexusRace™ software. You can download the software from www.garmin.com. You must connect the PC to the GND 10. For more information, see the GND 10 Installation Instructions.

Maintenance and Storage

- If needed, use a mild soap solution to clean the wind transducer, and rinse it with water. Do not use detergents or high-pressure water.
- It is recommended to remove the wind transducer and store it in a dry location if it will not be used for long periods of time.

Specifications

| Specification | Value |
|---|--|
| Dimensions (H) | 1.18 m (46.46 in.) |
| Weight | 320 g (11.29 oz.) |
| Cable length | 25 m (82 ft.) |
| Operating temperature | From -15° to 70°C (5° to 158°F) |
| Storage temperature | From -20° to 80°C (-4° to 176°F) |
| Water resistance rating | IEC 60529 IPX-6 (protected against heavy seas) |
| Power usage (wind transducer) | 0.33 W |
| Power usage (wind transducer and GND 10) | 0.85 W |
| Typical current draw at 12 VDC (wind transducer) | 28 mA |
| Typical current draw at 12 VDC (wind transducer and GND 10) | 71 mA |
| Wind speed range | From 0.8 to 90 knots (From 0.4 to 50 m/s) |