GARMIN.

GNX™ 120/130

Installation Instructions

Important Safety Information

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.

Contacting Garmin® Product Support

- Go to http://www.garmin.com/support for in-country support information.
- In the USA, call 913-397-8200 or 1-800-800-1020.
- In the UK, call 0808 238 0000.
- In Europe, call +44 (0) 870 850 1241.

Tools Needed

- Drill and drill bits
  - 44 mm (1 $^3/_4$ in.) hole saw
  - 4.5 mm ($^3/_{16}$ in.) drill bit
- Marine sealant (recommended)

Installing the Device

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.
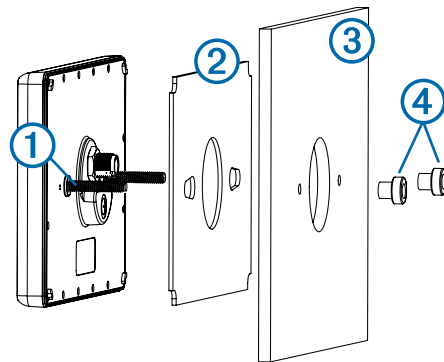
The mounting surface must be flat to avoid damaging the device when it is mounted.

When selecting a mounting location, observe these considerations.

- The mounting location should be at or below eye level to provide optimal viewing as you operate your vessel.
- The mounting surface must be strong enough to support the weight of the device and protect it from excessive vibration or shock.
- 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.
- The area behind the mounting surface must allow room for the routing and connection of the cables.

Mounting the Device

1. Trim the flush-mount template and ensure it will fit in the location where you plan to mount the marine instrument.

   The flush-mount template is included in the product box.
2. Secure the template to the selected mounting location.
3. Using a 44 mm (1 $^3/_4$ in.) hole saw or rotary cutting tool, cut the hole in the center of the template.
4. Drill the 4.5 mm ($^3/_{16}$ in.) mounting holes.
5. Remove the remainder of the template.
6. Install the threaded rods ① in the back of the marine instrument.

7. Place the included gasket ② on the back of the device.

   You should apply marine sealant around the gasket to prevent leakage behind the dashboard (recommended).
8. Place the marine instrument into the cutout ③.
9. Securely fasten the marine instrument from behind the mounting surface by tightening the supplied thumb nuts ④ on the threaded rods.
10. Connect the NMEA 2000® drop cable and route it to your NMEA 2000 backbone.
11. Snap the bezel into place.

Connection Considerations

The marine instrument connects to power and to data sources through a NMEA 2000 network.

Although the instrument cannot directly receive NMEA® 0183 data, it can display NMEA 0183 data from sources connected to a GNX 20 or GNX 21 device (sold separately) on the same NMEA 2000 network.

The instrument can also receive data from Nexus® instruments and sensors using a GND™ 10 device (sold separately).

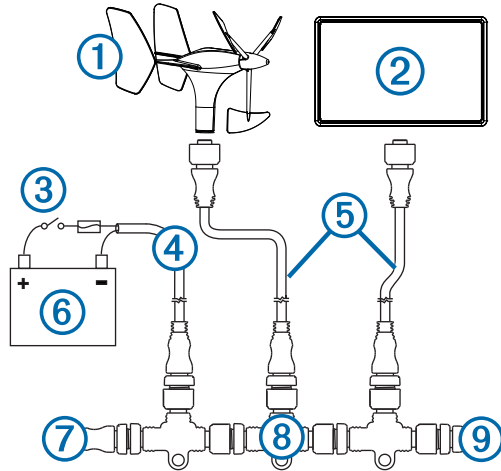#### NMEA 2000 Connection Considerations

NOTICE

If you have an existing NMEA 2000 network on your boat, it should already be connected to power. Do not connect the NMEA 2000 power cable to an existing NMEA 2000 network, because only one power source should be connected to a NMEA 2000 network.

If you are installing a NMEA 2000 power cable, you must connect it to the boat ignition switch or through another in-line switch. NMEA 2000 devices will drain your battery if the NMEA 2000 power cable is connected to the battery directly.

The marine instrument connects to a NMEA 2000 network on your boat. The NMEA 2000 network provides power to the marine instrument and data from NMEA 2000 devices such as a wind sensor. The included NMEA 2000 cables and connectors allow you to either connect the device to your existing NMEA 2000 network or create a basic NMEA 2000 network if needed.

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 the reference, go to www.garmin.com/manuals/GNX120.

Item	Description
①	Wind sensor
②	Marine instrument
③	Ignition or in-line switch
④	NMEA 2000 power cable
⑤	NMEA 2000 drop cable
⑥	12 Vdc power source
⑦	NMEA 2000 terminator or backbone cable
⑧	NMEA 2000 T-connector
⑨	NMEA 2000 terminator or backbone cable

Specifications

Device	Specification	Measurement
GNX 120	Dimensions (W x H x D)	181 x 115 x 17 mm (7.13 x 4.53 x 0.7 in.)
	Display size (W x H)	150 x 83 mm (5.9 x 3.27 in.)
	Weight	380 g (13.4 oz.)
	Max. power usage	0.5 W
	Compass-safe distance	0 mm (0 in.)

Device	Specification	Measurement
GNX 130	Dimensions (W x H x D)	249 x 153 x 19 mm (9.8 x 6.02 x 0.75 in.)
	Display size (W x H)	207 x 116 mm (8.15 x 4.57 in.)
	Weight	820 g (29 oz.)
	Max. power usage	0.5 W
	Compass-safe distance	0 mm (0 in.)
All models	Water rating*	IEC 60529 IPX7
	Temperature range	From -15 to 70°C (from 5 to 158°F)
	Material	Polycarbonate plastic

*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.

NMEA 2000 PGN Information

Type	PGN	Description
Transmit and receive	059392	ISO acknowledgment
	059904	ISO request
	060928	ISO address claim
	61184	Product information
	126208	NMEA: Command, request, and acknowledge group function
	126996	Product information
Transmit	126464	Transmit PGN list group function
Receive	126992	System time
	127245	Rudder
	127250	Vessel heading
	127488	Engine parameters: Rapid update
	127489	Engine parameters: Dynamic
	127508	Battery status
	128259	Speed: Water referenced
	128267	Water depth
	129025	Position: Rapid update
	129026	COG and SOG: Rapid update
	129029	GNSS position data
	129283	Cross track error
	129284	Navigation data
	129285	Navigation route and waypoint info
	129539	GNSS dilution of precision (DOP)
	130306	Wind data
	130310	Environmental parameters
	130311	Environmental parameters
	130312	Temperature
	130313	Humidity
	130314	Actual pressure