

GPS 158

Owner's Manual



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Getting Started

⚠ WARNING

See the *Important Safety and Product Information* beginning on [page 13](#) for product warnings and other important information.

Using the Device Keys



- Hold to turn the device on and off.
- Select to adjust the backlight.
- Select + and – to zoom in and out on the map.
- Select , , , and to move the map pointer around the map.
- Select **NAV** to navigate to a waypoint or follow a route or track.
- Select **PAGE** to change between the map and data page views.
- Select **QUIT** to exit a menu and return to the map or data page view.
- Select **MENU** once to open the menu for the current page.
- Select **MENU** twice to open the main menu.
- Select , , , and to highlight menu items.
- Select **ENTER** to select an item or make a selection.
- Select **MOB** to mark a man-overboard waypoint.

Selecting the Map or a Data Page

- 1 From the map or any data page, select **PAGE**.
- 2 Select **MENU** to change the settings for the selected page (optional).

Entering Letters and Numbers

You can enter letters and numbers using the on-screen keyboard.

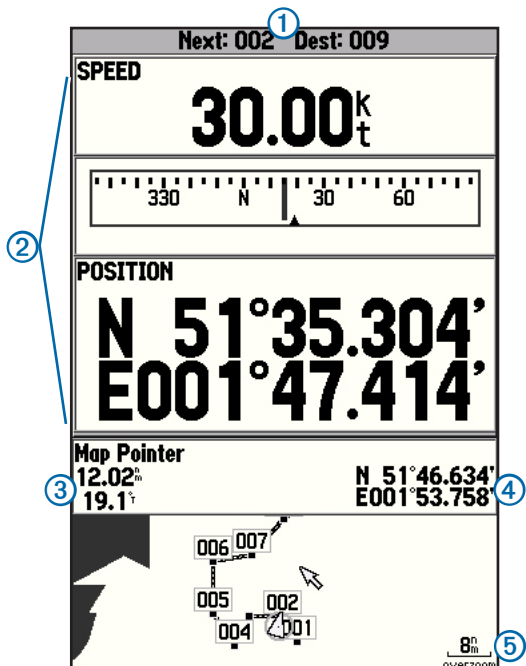
- 1 Select letters or numbers using , , , and .
- 2 Select **ENTER** after each letter or number.
- 3 Repeat steps 1 and 2 to enter all letters.
- 4 Select **OK** to accept the entry.

Map Views and Data Pages

Navigation View

The navigation view shows three data fields and a map centered on your current location.

TIP: To hide the data fields and display a full screen map, select **MENU > Full Screen Map**.



①	The next waypoint and final waypoint in your route
②	Data fields
③	Distance and bearing from your present location to the location of the map pointer
④	Coordinates of the map pointer
⑤	Map scale

Using the Map

Adjusting the Zoom Level

- 1 Select + to zoom in.
- 2 Select - to zoom out.

Measuring Distance

You can measure the distance and bearing between any two points on the map.

- 1 Select **MENU > Measure Distance**.
- 2 Move the map pointer to the first point.
- 3 Select **ENTER**.
- 4 Move the map pointer to the second point.

The distance and bearing from the first point to the second point appear in the data field at the top of the map.

Marking a Waypoint

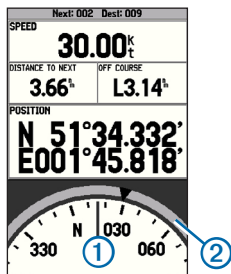
You can mark up to 3000 waypoints.

- 1 Move the map pointer to the desired location.
- 2 Select **ENTER**.
- 3 Modify the waypoint data (optional).

NOTE: Modifying the coordinates, distance, or bearing fields will change the location of the waypoint.

Compass View

The compass view is used to aid navigation. You can change the information displayed in the top three fields. The compass also displays the difference between your current heading ① and the heading necessary ② to follow the route or track.



Numbers View

You can change the information displayed in all fields.

Highway View

The highway view displays three data fields, plus a 3D view of your current heading, including any nearby waypoints, routes, or tracks. You can change the information displayed in the top three fields and the points displayed in the highway field.

Route View

The route view displays a list of waypoints for the route you are navigating and a 3D view of your current heading, including any nearby waypoints, routes, or tracks.

Navigation

You can navigate to a waypoint or follow a route or track.

Navigating to a Waypoint

- 1 Select **NAV** > **Go To Point** > **Waypoints**.
- 2 Select an option:
 - To view a list of all waypoints, select **By Name**.
 - To view a list of nearby waypoints, select **Nearest**.
- 3 Select a waypoint.
- 4 Select **Go To**.

Follow the on-screen directions to your destination, steering to avoid obstacles and hazards.

Creating a Route

You can save up to 50 routes.

- 1 Select **MENU** twice.
- 2 Select **Route**.
- 3 Select an unused route line.

The full screen map appears.
- 4 Move the map pointer to the location of the first point of the route.

NOTE: If the selected point is not a waypoint, it is saved as a waypoint.
- 5 Select **ENTER**.
- 6 Repeat steps 4 and 5 to select the remaining points on the route.
- 7 Select **MENU** to save the route.

Following a Route

- 1 Select **NAV > Follow Route**.
- 2 Select a route.
- 3 Select an option:
 - To follow the route, select **Activate**.
 - To follow the route in reverse, select **Invert and Activate**.Follow the on-screen directions to your destination, steering to avoid obstacles and hazards.

Following a Track

Before you can, follow a track, you must record a track ([page 7](#)).

- 1 Select **NAV > Follow Track**.
- 2 Select a track.
- 3 Select an option:
 - To follow the track, select **Original**.
 - To follow the track in reverse, select **Reverse**.

Using Man Overboard

You can use the man overboard feature to mark a waypoint and instantly begin navigating back to that waypoint.

Select **MOB > Yes**.

Stopping Navigation

Before you can stop navigation, you must be navigating to a waypoint or following a route or track.

Select **NAV > Stop Navigation**.

Viewing Celestial Information

- 1 Select **MENU** twice.
- 2 Select **Celes**.
- 3 In the **At** field, select an option:
 - To view celestial information for your current location, select **Current Position**.
 - To view celestial information for a saved waypoint, select **Waypoint**, and select a saved waypoint.
 - To view celestial information for a location that is not a saved waypoint, select **Other Position**, and select the location on the map.
- 4 In the **On** field, enter the date and time for which you want to view celestial information.

Viewing GPS Information

To view information about GPS satellites, select **GPS** in the main menu.

Viewing the Calendar

To view the calendar, select **Calen** in the main menu.

Device Settings

Select **MENU** twice.

Trip

Reset Trip: Resets the trip meter.

Reset Max Speed: Resets the maximum vessel speed recorded by the device.

Reset Odometer: Resets the odometer.

Reset All: Resets the trip meter, max speed, and odometer.

Tracks

Active

Record Mode: Sets the track to record until the device memory is full, or to continue recording indefinitely, replacing the oldest track record when the memory is full.

Interval: Sets the track to record points in intervals based upon distance, time, or resolution.

Value: Sets the value of the distance, time, or resolution track recording interval.

Erase: Delete the saved track memory.

Time

Time Format: Sets 12- or 24-hour time.

Time Zone: Sets a time zone.

Daylight Savings Time: Sets the clock to for daylight savings time.

Pages

Sets which pages appear when you select **PAGE**.

Map

General

Detail: Sets the level of detail displayed on the map view.

Orientation: Sets the map orientation to **North Up**, **Track Up**, or **Course Up**.

AutoZoom: Sets the map to automatically zoom in and out based on vessel speed.

Color Mode: Sets to display land or water in lighter tones.

Source

Basemap: Sets whether a map displays in the map view. If you select **Off**, land and water features do not appear. Waypoints, tracks, and routes appear on the map view regardless of whether the basemap is turned on or off.

Waypoints

Sets the text size and zoom level for waypoints and the active route.

Nav Line

Heading Line: Sets to display the heading line.

Bearing Line: Sets the zoom level.

Course Line: Sets the zoom level.

Track

Sets a zoom level for saved tracks and the track log.

Highway

Sets the features that display on the highway view.

System

Beeper: Sets when the beeper sounds.

Speed Filter: Sets the speed filter.

Language: Sets the system language.

System Information: Displays the Unit ID and other information.

Units

Position Format: Sets the position values to the selected format.

Map Datum: Sets the map datum to the selected format.

Heading: Sets the heading value to the selected format.

Distance, Speed and Elevation: Sets the values to the selected format.

Depth: Sets the depth values to the selected format.

Communications

Sets the serial data format and transfer mode. Contact your Garmin authorized dealer to use transfer mode, which is for software updates.

NMEA® Out Sentences

GPRMC, GPRMB, GPGGA, GPGSA, GPGSV, GPGLL, GPBOD, GPBWC, GPVTG, GPXTE, PGRME, PGRMZ, PGRMM, GPRTE, GPWPL, GPAPB

NMEA In Sentences

DPT, DBT, MTW, VHW, WPL

Alarms

System

Clock: Sets an alarm to sound at a specified time of day.

Power: Sets an alarm to sound when the voltage is below the voltage entered.

DGPS: Sets an alarm to sound when the device is using DGPS.

Accuracy: Sets an alarm to sound when the GPS accuracy drops below the specified threshold.

Navigation

Anchor Drag: Sets an alarm to sound when your vessel drifts farther than the specified distance while at anchor.

Arrival: Sets an alarm to sound when you arrive at your destination.

Off Course: Sets an alarm to sound when your boat is farther off course than the specified distance.

Installation

WARNING

See the *Important Safety and Product Information* beginning on [page 13](#) for product warnings and other important information.

CAUTION

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

Tools Needed

- Drill and drill bits
- $\frac{3}{8}$ in. wrench or socket
- Masking tape
- Number 2 Phillips screwdriver
- Marine sealant
- Hardware for the swivel mount (bolts or screws)

Installation Preparation

Before permanently installing any part of the device, plan the installation by determining the location of the various components. Verify that the cables are long enough to connect the components to each other and to power.

About the Mount

The device is mounted using the included swivel mount. When planning a mounting location, choose a location that you can see as you operate your vessel, provides easy access to the keys on the device, and is the appropriate distance from a compass.

Installing the Swivel Mount

- 1 Select a mounting location ([page 9](#)).
- 2 Prepare the swivel-mount base ([page 9](#)).
- 3 Fasten the mount with the cables installed in the mount ([page 11](#)), or without the cables installed in the mount ([page 10](#)).

Swivel-Mount Location Considerations

For optimal performance, consider these guidelines when selecting the swivel-mount location.

- The location provides a clear view of the screen and access to the keys on the device.
- The location is sturdy enough to support the device and the mount.
- You can route the cables either from under the swivel mount, or from behind the device.
- The location is the appropriate distance from a compass.

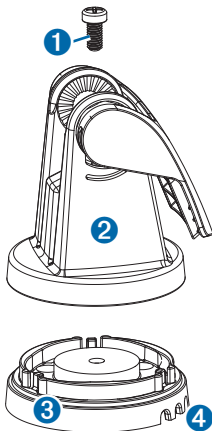
Preparing the Swivel-Mount Base Installation

NOTICE

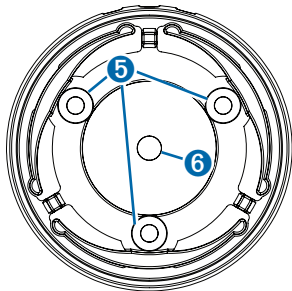
Use pan-head screws or bolts when securing the swivel-mount base. Screws or bolts with countersunk heads will damage the base.

- 1 After you have chosen the location to install the swivel mount ([page 9](#)), determine whether you will attach the mount to the surface using screws or bolts, and choose the appropriate fastening hardware:
 - To attach the base with screws, use self-tapping, pan-head wood screws, either size #8 or a diameter of $\frac{5}{32}$ in. (4 mm), with an appropriate drill bit for the pilot hole.
 - To attach the base with bolts, use pan-head bolts, either size #8 or a diameter of $\frac{5}{32}$ in. (4 mm), with the appropriate washers and nuts. Use a drill bit of the same diameter as the bolt.

- 2 Remove the 10 mm M6×1 Phillips screw ❶ and separate the swivel mount ❷ from the base ❸.



- 3 If you plan to route the cables from under the mounting surface, orient the base so the pass-through holes ❹ face the desired direction.
- 4 Using the base as a template, mark the pilot hole locations ❺.

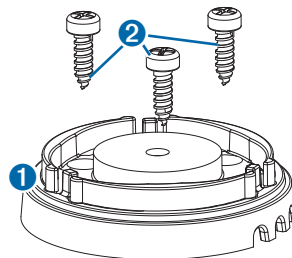


- 5 If you plan to route the cables from under the mounting surface, mark the location in the center ❻.
- 6 Using the appropriate drill bit for the hardware, drill the three pilot holes.
- 7 If you plan to run the power and transducer cables from under the mounting surface, use a 5/8 in. (16 mm) drill bit to drill a hole through the mounting surface at the location you marked in step 5.

Fastening the Swivel Mount without the Cables Installed in the Mount

Follow these steps only if you do not need to run the cables through the mounting surface and the swivel mount.

- 1 Place the base ❶ on the mounting surface, and fasten it using the appropriate screws or bolts ❷.



- 2 Place the swivel mount on the base, and replace the 10 mm M6×1 Phillips screw.
- 3 Seal the cable pass-through holes with marine sealant.

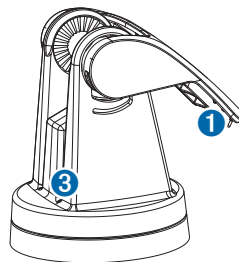
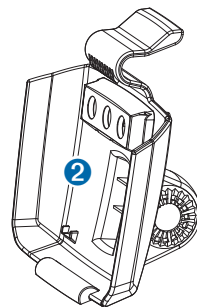
Fastening the Swivel Mount with the Cables Installed in the Mount

Follow these steps only if you need to run the cables through the mounting surface and the swivel mount.

- 1 If you are installing the cables in the mount, feed the cables through the $\frac{5}{8}$ in. (16 mm) center hole you drilled when preparing the base.
- 2 Place the base on the mounting surface.
- 3 Route the cables through the cable pass-through holes.
- 4 Loosely fasten the base using the appropriate screws or bolts.
- 5 Place the swivel mount on the base, but do not fasten it.
- 6 Place the cradle into the swivel mount ([page 11](#)).
- 7 Pull out enough slack from the power and transducer cables so the mount can fully swivel to the desired positions when the cables are connected.
- 8 Remove the cradle and the swivel mount from the base.
- 9 Apply marine sealant to the $\frac{5}{8}$ in. (16 mm) center hole and to the cable pass-through holes.
- 10 Securely fasten the base with the appropriate screws or bolts.
- 11 Place the swivel mount on the base, and fasten it using the included 10 mm M6×1 Phillips screw.

Installing the Cradle in the Swivel Mount

- 1 With the locking arm ① in the upward position, place the cradle ② into the swivel mount ③.



- 2 Tilt the mount to the desired viewing angle.
- 3 Press the locking arm down.

Installing the Cables and Connectors

Wiring to Power

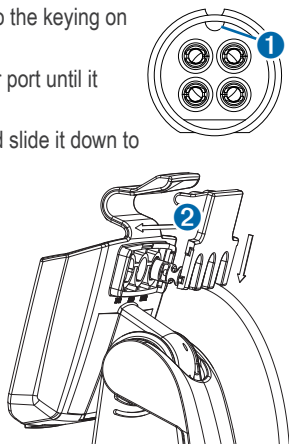
- 1 Route the power cable from the swivel mount to the boat battery or fuse block. If necessary, extend the wires using 20 AWG or larger wire.
- 2 Connect the red wire to the positive terminal on the battery or fuse block, and connect the black wire to the negative terminal.

Connecting the Cable and Placing the Device in the Cradle

- 1 Compare the divot ① on the cable connector to the keying on the cradle port.
- 2 Push the power cable connector into the power port until it rests firmly in the port.
- 3 Place the locking bracket ② over the cable and slide it down to lock it in place on the cradle.

You will hear an audible click when the locking bracket is correctly installed.

- 4 Place the base of the device in the bottom of the cradle.
- 5 Tilt the device toward the cradle until it fastens in place.



Removing the Device From the Cradle

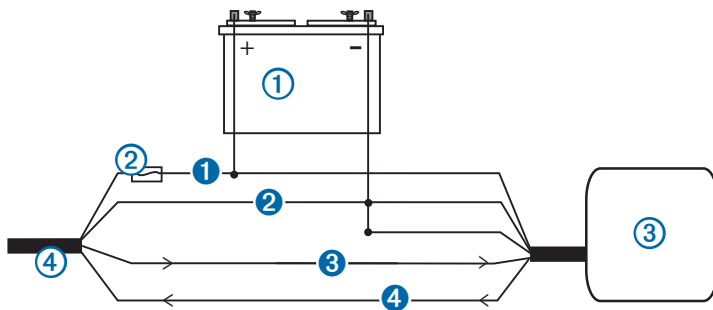
- 1 Press the release lever on the cradle until the device is released.
- 2 Tilt the device forward and lift it out of the cradle.
- 3 Turn the cable locking ring to release the lock, and remove the cable from the port.

Connecting the Antenna

If your device does not have an internal antenna or it came with an external antenna, you should connect the external antenna to the device.

- 1 Install the antenna according to the instructions.
- 2 Connect the antenna cable to the BNC connector on the back of the device.

NMEA® 0183 Connection Diagram



Item	Description
①	12 VDC power source
②	3 A fuse
③	NMEA 0183 compliant device
④	GPS 158 Wiring harness

Item	GPS 158 Wire Function	GPS 158 Wire Color	NMEA 0183 Wire Function
①	Power	Red	Power
②	Ground	Black	Data Ground
③	Tx	White	Rx/A (+)
④	Rx	Green	Tx/A (+)

Appendix

Specifications

Specification	Measurement
Temperature Range	From 5°F to 131°F (from -15°C to 55°C)
Power Source Voltage Range	10–36 Vdc
Rated Current	1 A
Fuse	AGC/3AG - 3.0 A
Case	Fully gasketed, high-impact plastic, waterproof to IEC 60529 IPX-7
Compass Safe Distance	13.8 in. (350 mm)

Cleaning the Outer Casing

NOTICE

Avoid chemical cleaners and solvents that can damage plastic components.

- 1 Clean the outer casing (not the screen) of the device using a cloth dampened with a mild detergent solution.
- 2 Wipe the device dry.

Cleaning the Screen

NOTICE

Cleaners containing ammonia will harm the anti-reflective coating.

The screen is coated with a special anti-reflective coating that is very sensitive to skin oils, waxes, and abrasive cleaners.

- 1 Apply an eyeglass lens cleaner specified as safe for anti-reflective coatings to a clean, lint-free cloth.
- 2 Gently wipe the screen.

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 www.garmin.com/support and click **Contact Support** for in-country support information.
- In the USA, call (913) 397.8200 or (800) 800.1020.
- In the UK, call 0808 2380000.
- In Europe, call +44 (0) 870.8501241.

Important Product and Safety Information

WARNINGS

Failure to avoid the following potentially hazardous situations could result in an accident or collision resulting in death or serious injury.

Operation Warnings

- When navigating, carefully compare information displayed on the unit to all available navigation sources, including information from visual sightings, local waterway rules and restrictions, and maps. For safety, always resolve any discrepancies or questions before continuing navigation.
- Use the electronic chart in the unit only to facilitate, not to replace, the use of authorized government charts. Official government charts and notices to mariners contain all information needed to navigate safely.
- Use this unit only as a navigational aid. Do not attempt to use the unit for any purpose requiring precise measurement of direction, distance, location, or topography.
- If your unit has video input capabilities, do not attempt to operate or watch video input while operating or navigating your boat. Operating or watching the video

input while the boat is moving could cause an accident or collision resulting in property damage, serious injury, or death.

Product Environmental Programs

Information about Garmin's product recycling program and WEEE, RoHS, REACH, and other compliance programs can be found at www.garmin.com/aboutGarmin/environment.

Declaration of Conformity

Hereby, Garmin, declares that this product is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC. To view the full Declaration of Conformity, go to www.garmin.com/compliance.

Limited Warranty

Garmin's non-aviation products are warranted to be free from defects in materials or workmanship for one year from the date of purchase. Within this period, Garmin will, at its sole option, repair or replace any components that fail in normal use. Such repairs or replacement will be made at no charge to the customer for parts or labor, provided that the customer shall be responsible for any transportation cost. This warranty does not apply to: (i) cosmetic damage, such as scratches, nicks and dents; (ii) consumable parts, such as batteries, unless product damage has occurred due to a defect in materials or workmanship; (iii) damage caused by accident, abuse, misuse, water, flood, fire, or other acts of nature or external causes; (iv) damage caused by service performed by anyone who is not an authorized service provider of Garmin; (v) damage to a product that has been modified or altered without the written permission of Garmin; or (vi) damage to a product that has been connected to power and/or data cables that are not supplied by Garmin. In addition, Garmin reserves the right to refuse warranty claims against products or services that are obtained and/or used in contravention of the laws of any country. This product is intended to be used only as a travel aid and must not be used for any purpose requiring precise measurement of direction, distance, location or topography. Garmin makes no warranty as to the accuracy or completeness of map data in this product.

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Garmin retains the exclusive right to repair or replace (with a new or newly-overhauled replacement product) the device or software or offer a full refund of the purchase price at its sole discretion. SUCH REMEDY SHALL BE YOUR SOLE AND EXCLUSIVE REMEDY FOR ANY BREACH OF WARRANTY.

To obtain warranty service, contact your local Garmin authorized dealer or call Garmin Product Support for shipping instructions and an RMA tracking number. Securely pack the device and a copy of the original sales receipt, which is required as the proof of purchase for warranty repairs. Write the tracking number clearly on the outside of the package. Send the device, freight charges prepaid, to any Garmin warranty service station.

Online Auction Purchases: Products purchased through online auctions are not eligible for warranty coverage. Online auction confirmations are not accepted for warranty verification. To obtain warranty service, an original or copy of the sales receipt from the original retailer is required. Garmin will not replace missing components from any package purchased through an online auction.

International Purchases: A separate warranty may be provided by international distributors for devices purchased outside the United States depending on the country. If applicable, this warranty is provided by the local in-country distributor and

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