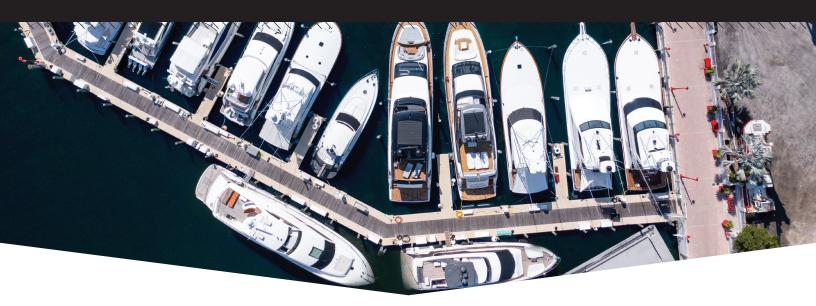
PRODUCT UPDATE

JANUARY 2024 MARINE SOFTWARE UPDATE



In an ongoing effort to improve our products and provide enhanced features to existing users, we are excited to announce the Q1 2024 marine software update. The update provides improved functionality and new features throughout our marine systems.

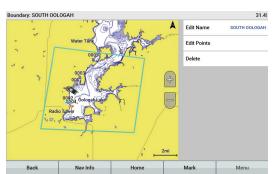
The preferred update method is a free download using the ActiveCaptain® mobile app or from a computer with Garmin Express™ software. A preloaded update card is also available for purchase and will be shipped directly from Garmin. Visit <u>here</u> for all update methods.

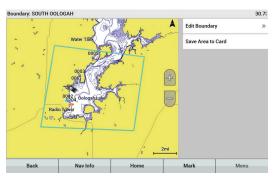
For the most up-to-date chart data available, visit our <u>chart update page</u> or <u>marinesupport.garmin.com</u> to find information on updating your device's charts, or tap the **Download Charts** option from the ActiveCaptain app to see what's available. For other options and more information on available marine charts, visit our <u>marine charts</u> and <u>maps web page</u>.

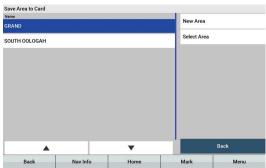
Please see below for a few featured highlights found in the update as well as a detailed reference table at the end of the document.

ECHOMAP™ Chartplotters – Export by Region

This update adds export by region support to ECHOMAP Ultra and ECHOMAP UHD chartplotters, which allows the user data to be saved to the memory card within a specified boundary.







AIRMAR® Transducer: Automatic Detection and Drive

This update allows the GSD™ sonar modules and chartplotters specified below to automatically detect and drive AIRMAR B75HW, AIRMAR B175MW and AIRMAR TM185MW transducers.

Sounders	Supports B75HW	Supports B175MW	Supports TM185MW	
GSD 25	Yes	Yes	Yes	
GSD 26	Yes	Yes	Yes	
GSD 28	Yes	Yes	Yes	
GPSMAP® 8400xsv/8600xsv	Yes	Yes	Yes	
Volvo 8400xsv/8600xsv	Yes	Yes	Yes	
GPSMAP 10x2/12x2 Keyed	Yes	Yes	Yes	
GPSMAP 7x3/9x3/12x3	Yes	Yes	Yes	
Volvo 7x3/9x3/12x3	Yes	Yes	Yes	
ECHOMAP™ Ultra 10/12	Yes	No	No	
ECHOMAP Ultra 2 10/12	Yes	No	No	
ECHOMAP UHD2 Touch 6/7/9	Yes	No	No	
ECHOMAP UHD2 Keyed 5/7	Yes	No	No	

Autopilot Safety Alarms

This update adds new autopilot safety alarms to detect scenarios where autopilot is not able to command the vessel in the way it's intended.

New Alarms:

Off course alarm – This alarm informs the user if the vessel heading differs from the commanded heading for too long. This alarm is user-configurable. It can be toggled on or off by the user. The user can specify what heading difference triggers the alarm. This alarm is intended to help detect scenarios where the autopilot cannot achieve the commanded heading due to low speeds, high winds/currents or hardware malfunction.

Disengaged alarm – This alarm informs the user that the autopilot can no longer control the vessel steering. This helps scenarios where the user may have adjusted the vessel heading by using the steering wheel, and the autopilot has disengaged without them knowing. This alarm is only supported on steer-by-wire installations. It can be toggled on or off by the user.









ActiveCaptain® App Graphics Refresh

This update gives the ActiveCaptain app a more modern look and feel and makes it more consistent with the chartplotter user interface.

These updates include:

- · Updated boat apps screen with tiles
- Updated splash screen
- · Updated background
- · Updated icon and screen elements

Sailing Auto Response and Tack Time

Sailing auto response - This feature adjusts the response setting based on the sea and wind conditions.

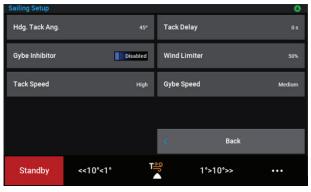
- The response can be lowered in calm conditions to prevent an overactive rudder.
- The response can be raised in rough conditions to respond to wind and wave disturbances.
- · Auto response has high, moderate, low, and off options.

Tack and gybe speed – Allows users to adjust the speed at which the autopilot completes tack and gybe maneuvers.

- Tack speed and gybe speed have options of minimum, low, medium, high and maximum.
- Tack and gybe improvements This improves tack and gybe maneuver performance.
 - Added 5-degree bear-away angle to allow the boat to regain speed after completing a tack or gybe.
 - The tack and gybe button interface was simplified.







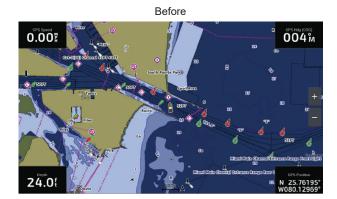


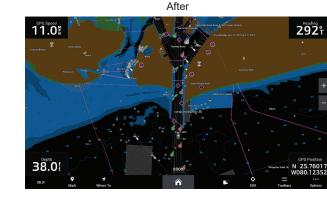


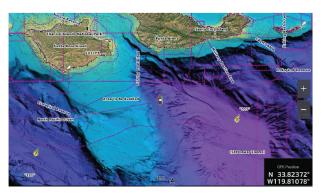


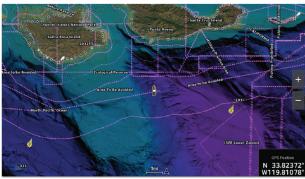
Night Mode Improvements

This update improves the contrast of important navigation features such as contours and hazards, and it reduces the use of bright colors for less eyestrain when using the chart for long periods at night. These updates are focused on Garmin Navionics+™ and Garmin Navionics Vision+™ charts.









Auto Guidance+™ Technology Path Range Improvements

This update improves the Auto Guidance+1 path range and computing speed. Path range improvements require updated chart content available for customers with an active Garmin Navionics+/Garmin Navionics Vision+ subscription.

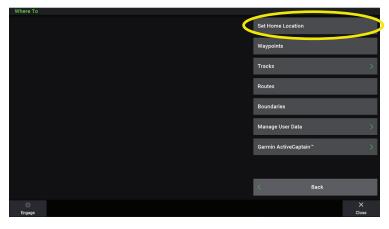




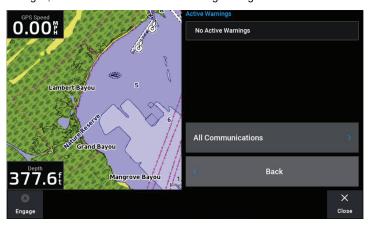
User Interface Improvements - Where To Button and Navigate Home Feature

Chartplotters now offer a new Where To button that replaces the info button on the bottom control bar to streamline access to user data. This update also adds the Navigate Home feature, which allows you to set a home location and navigate to it via Auto Guidance technology for simple routing.





Additionally, the notification center button has been updated and now provides streamlined access to the AIS list, DSC list, inReach® satellite communicator messages, smart notifications and the warning manager.





OnDeck™ Hub – Sensor Reporting to Chartplotters

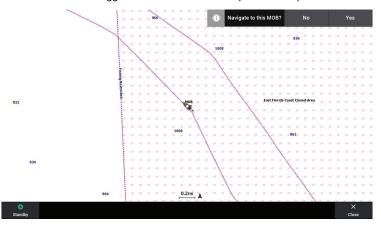
This update allows the following OnDeck Hub sensors to be displayed on compatible chartplotters. Previously, this data was only available on the ActiveCaptain® app.

- OnDeck Hub input voltage
- OnDeck Hub battery 1 DC voltage
- OnDeck Hub battery 2 DC voltage
- OnDeck Hub user-selected temperature sensor

DC Volt.	DC Volt.	DC Volt.			
13.9 _v	8.4 _v	15.3 _v			
Unit Voltage	Live Well	GPS Hdg (COG)			
13.9 _v	75.8 :	188 %			

Automatic NMEA 2000® Networking Man Overboard Detection and Alert

With this update, standard NMEA 2000 MOB buttons can now trigger MOB functions on compatible chartplotters.



Expanded Color Themes

This update allows users to customize the accent colors on their compatible chartplotters with six additional colors. These additional accent colors are used throughout the user interface.





PRODUCT UPDATE

JANUARY 2024 MARINE SOFTWARE UPDATE

ECHOMAP™ Chartplotters – Updated Station List

This update optimizes the station list to represent the most common vessel types used by ECHOMAP chartplotter customers.

New ECHOMAP Stations:

- Main Helm
- Tower
- Console
- Navigation
- Port
- Starboard
- Bow
- Stern
- Trolling Motor

Station Name

A station is made up of an individual or group of displays that are located in the same area of the vessel. All displays in the station will respond to SmartMode™ layout selections.

Fly Bridge

Docking

Tower

Console

Cockpit

Navigation

✓ Back

Station Name A station is made up of an individual or group of displays that are located in the same area of the vessel. All displays in the station will respond to SmartMode[®] layout selections. Tower Console Navigation Port Starboard Bow Aback

Compatibility		ı								l			
	GPSMAP® 9000 (19"-27")	GPSMAP 8600 (17"-24")	GPSMAP 8600xsv (10"-16")	GPSMAP 8700 Black Box	GPSMAP 7x3/9x3/12x3	GPSMAP 10x2/12x2 (Key)	TD 50	GHC™ 50	ECHOMAP™ ULTRA 2 (10/12")	ECHOMAP UHD2 (6/7/9" Touch)	ECHOMAP UHD2 (5/7" Key)	Echomap Ultra (10/12")	Echomap UHD (7/9" Touch)
ECHOMAP Chartplotters — Export by Region	•	•	•	•	•	•	•		•	•		•	•
Autopilot Safety Alarms	•	•	•	•	•	•	•	•	•	•			
ActiveCaptain® App Graphics Refresh	Available with Current ActiveCaptain App												
Sailing Auto Response and Tack Time	•	•	•	•	•	•	•	•	•	•			
Night Mode Improvements	•	•	•	•	•	•	•		•	•	•		
Auto Guidance+™ Path Range Improvements¹	•	•	•	•	•	•	•		•	•	•		
User Interface Improvements — Where To and Navigate Home	•	•	•	•	•	•	•		•	•	•		
OnDeck™ Hub — Sensor Reporting to Chartplotters	•	•	•	•	•	•	•		•	•			
Automatic NMEA 2000 [®] Man Overboard Detection and Alert	•	•	•	•	•	•	•		•	•			
Expanded Color Themes	•	•	•	•	•	•	•	•					
ECHOMAP Chartplotters — Updated Station List									•	•			

KEY

21.3

- New feature with the January 2024 software release
- Product already has this feature

¹Auto Guidance is for planning purposes only and does not replace safe navigation operations