

In an ongoing effort to improve our products and provide enhanced features to existing users, we are excited to announce the Q2 2024 marine software update. This 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 here for all update methods.

For the most up-to-date chart data available, visit our chart update page or check the marine support section on Garmin.com 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 more information on available marine charts, visit our marine chart viewer.

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

Custom Combo Layout

Custom combos are layout options that enable boat builders to create unique-looking pages. This gives them the flexibility to make their Garmin chartplotters better match any boat they build.

A custom combo page can display functions (e.g., nav chart, sonar, radar, etc.), gauges, digital switches and overlay bars, and it can use a custom background image uploaded by the boat builder. Custom combos are similar to the existing custom home page feature (formerly OEM dashboard) that boat builders can already set up on Garmin chartplotters.



Custom Combo

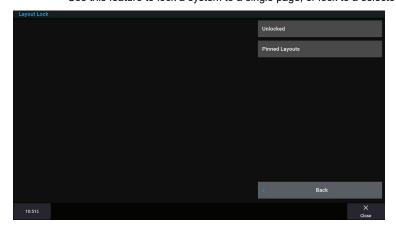


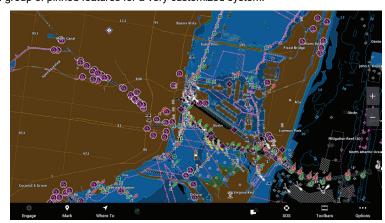
Custom Home Page

Lock-to-Function

The Lock-to-Function feature enables boat builders to limit the virtual device functions available to the user to a single function or a small group of functions. When locked, the option to access the home screen is removed.

- The intended use case is for boat builders to configure small devices such as the TD50 as a fixed OneHelm™ hub or gauge display.
- Boat builders could also use this feature to lock the configuration of all displays to provide a fixed dashboard experience where each display has a fixed purpose.
- Use this feature to lock a system to a single page, or lock to a selected group of pinned features for a very customized system.





ActiveCaptain® App OEM Icon and Skin

The ActiveCaptain app now includes the ability for a manufacturer or boat builder to create a customized brand experience.

These updates include:

- Customizable app icon, splash screen and lifestyle header image
- · Customer-selectable menus indicating manufacturer brand, engine brand and other important vessel details
- Ability for boaters to load their own vessels or lifestyle images

Garmin OEM partners should contact their local Garmin representative for more information.



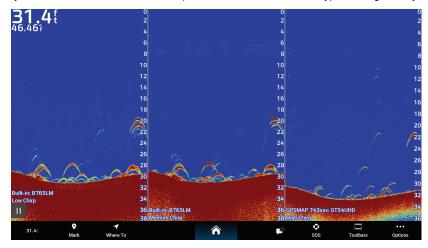




Any Sonar, Anywhere

With this update for traditional, ClearVü™, SideVü™ and triple-beam sonar types:

- Users can now select a different transducer for each sonar view. Each custom combo has its own settings, so users can create multiple combos that are viewing different sets of transducers and quickly switch between them.
- Users can now add more than one of the same type of sonar window to a custom combo, so they can compare data from any transducers on the boat on the same screen. One specific use case this enables is triple channel CHIRP. A fisher who has low-, medium- and high-frequency transducers can now display them all side by side on the same screen and compare them to determine what types of targets they are seeing.



GSD 28[™] Sonar Module – Add Additional AIRMAR® Transducer Support

AIRMAR transducer: automatic detection

- This update allows GSD 28 sonar module to automatically detect and drive Airmar R599LM, R509LM, CM599LM and PM111LHW transducers.
- Once properly auto-detected, the Garmin RapidReturn™ feature becomes available on these transducer models.

Garmin Navionics+™ Cartography Built-in Subscription and Map Download Status

This update improves the visibility of the built-in Garmin Navionics+ subscription and map download status.

These updates include:

- Built-in Garmin Navionics+ maps with an active subscription will update automatically when a separate Garmin Navionics+ map card is being used, copying updated content from the card to the chartplotter memory.
- A new indicator will appear on the chart for all units and on the Station Control Center for GPSMAP® units when the Garmin Navionics+ built-in map is updating in the background.
- A new banner will notify the user if their built-in map update is interrupted.
- Built-in map update progress information will appear on the **Software Information** page, which can be accessed by clicking the update indicator on the chart.
- · Garmin Navionics+ subscription message banners have been updated.



exFAT Support (64 GB and Larger SD™ Card Support)

Customers are now able to use cards larger than 32 GB, up to 1 TB in select chartplotters and the USB card reader. See this <u>support FAQ</u> for more info on supported products.

Compatibility Table:										
, ,	GPSMAP® 9000 (19"-27")	GPSMAP 8600 (17"–24")	GPSMAP 8600xsv (10"-16")	GPSMAP 8700 Black Box	GPSMAP 7x3/9x3/12x3	GPSMAP 10x2/12x2 (Key)	ECHOMAP™ ULTRA 2 (10/12")		ECHOMAP UHD2 (5/7" Key)	ECHOMAP Ultra (10/12")
1 TB card support via built-in card	•					•	•	•	•	•
1 TB card support via external USB card reader	•	•	•	•	•					

Configurable Wi-Fi® Technology Hosting OnDeck™ Hub or Chartplotter

The update introduces a configurable Wi-Fi hosting feature that allows customers to choose either the OnDeck Hub or an eligible chartplotter as the Wi-Fi host. The host device can be changed quickly and easily using the chartplotter settings menu.

This feature provides multiple benefits:

- Greater control of the wireless network allows users to switch the Wi-Fi host between the OnDeck Hub and compatible chartplotters to determine which works best for their wireless needs.
- Because the Wi-Fi host is no longer tied exclusively to the OnDeck Hub, installers have more flexibility when selecting a mounting location for the Hub.
 When chartplotters with Wi-Fi technology are on the same network, there is no need to make installation-location decisions based on wireless coverage concerns.

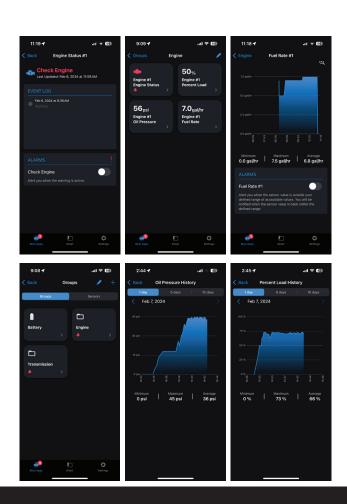
OnDeck™ Hub - Engine Graphs in the ActiveCaptain® App

This update improves engine data reporting to now offer graphs with historical data in the ActiveCaptain app.

- New sensor reporting graphs of historical engine parameters reported by OnDeck
- Expanded engine and transmission warnings reported by OnDeck

The table below shows engine data and warnings now graphed:

Sensor	Sensor Type
Engine RPM	Point-based
Engine boost pressure	Point-based
Oil pressure	Point-based
Oil temperature	Point-based
Engine temperature	Point-based
Alternator volts	Point-based
Fuel rate	Point-based
Coolant pressure	Point-based
Fuel pressure	Point-based
Percent load	Point-based
Percent torque	Point-based
Transmission oil temperature	Point-based
Transmission oil pressure	Point-based
Fluid level	Point-based
Engine tilt/trim	Point-based
Fuel rate	Point-based
Engine warning	State-based
Transmission warning	State-based



OnDeck™ Hub - Battery Monitoring

This update enables:

- Six new battery management metrics sourced from NMEA 2000® and reported by OnDeck for visibility within the ActiveCaptain® app sensor tiles
- · New alarm settings for battery monitoring

An additional monitoring device such as a smart shunt is required for NMEA 2000 output.

The list of new items monitored:

Name	Source	Data
Battery current	NMEA 2000 (PGN 127508)	current
Battery case temperature	NMEA 2000 (PGN 127508)	temperature
Battery DC type	NMEA 2000 (PGN 127506)	DC type - battery, alternator, converter, solar cell, wind generator, error and no data
Battery state of charge	NMEA 2000 (PGN 127506)	percentage
Battery state of health	NMEA 2000 (PGN 127506)	percentage
Battery time remaining	NMEA 2000 (PGN 127506)	time



Voice Control: Brightness Range

This update adds the Set Brightness/Set Backlight command to Voice Control

- Users can now directly set a brightness (backlight) level by voice, e.g., "Set backlight to 80%"
- Enables faster hands-free control of the backlight
- Any value in the range 0–100 is supported, e.g., "Set backlight to 67%"

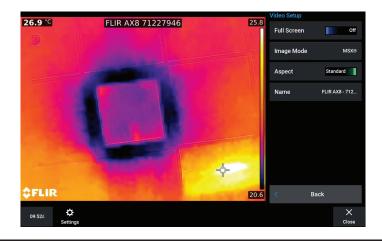
This can be helpful when the brightness is so low you cannot see the screen.

FLIR AX8 Camera Integration

Garmin now supports the FLIR MTMS (Marine Thermal Monitoring system with AX8).

We added support to:

- Stream video output
- Receive temperature alarms from the AX8
- · Change the Picture Mode: Visible, Thermal and Thermal MSX (a blend of visible and thermal)
- Change the palette used for thermal and MSX modes
- Change the camera name



Mercury® Hooks (Skyhook, Bowhook, Drifthook)

This update adds an overlay bar that works with the Mercury Gateway to control their Skyhook, Bowhook and Drifthook features.

- Skyhook is a mode where the heading and position are maintained.
- Bowhook is a mode where the position is maintained, but the heading may change.
- Drifthook is a mode where the heading is maintained, but the position may change.





NMEA 0183 Output Sentences

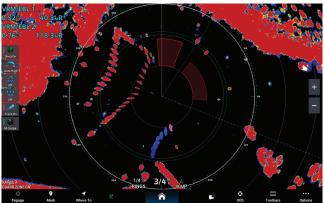
This update enables additional output sentences to be broadcast over NMEA 0183:

- GPZDA: UTC day, month, year and local time zone offset
- RATLB: Target label
- RATLL: Target latitude and longitude
- RATTD: Tracked target data



Dual Guard Zones and Dual Variable Range Markers (VRM)/Electronic Bearing Lines (EBL)

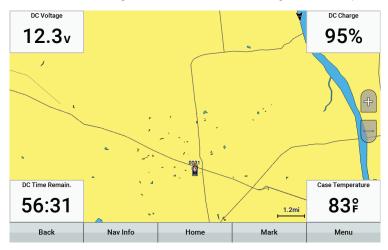
This update allows the user to enable and independently configure a second set of VRM and EBL or a second guard zone area on the radar display.



Implement Battery Data Fields for ECHOMAP™

The battery data fields adds the ability to monitor important marine battery information from the screen overlay and numbers page.

Data includes: DC voltage, DC current, DC time remaining, DC case temperature, DC state of charge, DC state of health.



Numbers							
Case Temperatu	ire	DC Current	DC State of Charge				
83		5.0	95				
(°F)		(A)	(%)				
DC State of Hea	lth	DC Time Remaining		OC Voltage			
87		56:31		12.3			
Back	Nav Info	Home		Mark Menu			

PRODUCT UPDATE

APRIL 2024 MARINE SOFTWARE UPDATE

Compatibility						1							
	GPSMAP® 9000 (19"-27")	GPSMAP 9000 Black Box	GPSMAP 8600 (17"-24")	GPSMAP 8600xsv (10"-16")	GPSMAP 8700 Black Box	GPSMAP 7x3/9x3 /12x3/16x3	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")
Custom combo layout	•	•	•	•	•	•	•	•					
Lock-to-function	•	•	•	•	•	•	•	•					
ActiveCaptain [®] app OEM icon & skin	Available with Current ActiveCaptain App (OEM Feature Requires Setup Wizard)												
Any sonar, anywhere	•	•	•	•	•	•	•	•		•	•	•	
GSD 28 [™] sonar module – add additional AIRMAR® transducer support	Available with Updated GSD 28 Sonar Module												
Garmin Navionics+™ cartography built-in subscription and map download status	•	•	•	•	•	•	•			•	•	•	
exFAT support (64 GB and larger SD™ card support)¹	•	•	•	•	•	•	•			•	•	•	•
Configurable Wi-Fi® technology hosting OnDeck™ hub or chartplotter	•	•	•	•	•	•	•	•	•				
OnDeck [™] hub - engine graphs in the ActiveCaptain® app					Available wi	ith Current Activ	veCaptain App	and Updated (OnDeck Hub				
OnDeck™ hub – battery monitoring	•	•	•	•	•	•	•	•		•	•		
Voice control: brightness range	•	•	•	•	•	•							
FLIR AX8 camera integration	•	•	•	•	•	•	•						
Mercury® hooks (skyhook, bowhook, drifthook)	•	•	•	•	•	•	•	•					
NMEA 0183 output sentences	•	•	•	•	•	•	•						
Dual guard zones and dual variable range markers (VRM)/electronic bearing lines (EBL)	•	•	•	•	•	•	•						
Implement battery data fields for ECHOMAP™													•



¹An external USB card reader may be required.

Wi-Fi is a registered trademark of the Wi-Fi Alliance.