

# GARMIN®



2025 } MARINE  
CATALOG

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# SONAR TECHNOLOGY



## LIVESCOPE™ PLUS

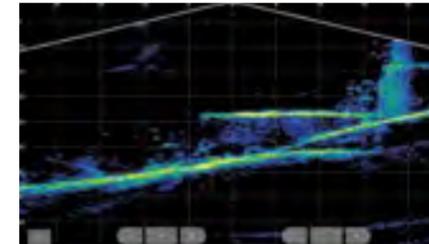


The best of the best just got better with the LiveScope Plus System. Offering improved resolution, reduced noise, clearer images and better target separation, it features built-in stabilization to keep the sonar image steady on your compatible chartplotter, even in rough conditions. Now it's easier than ever to see structure, bait and fish swimming around your boat in real time.

Part no: 010-02706-00 LVS34

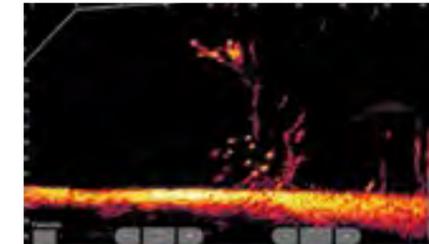
### THREE MODES IN ONE TRANSDUCER

#### LIVESCOPE™ PLUS DOWN MODE



View live, easy-to-interpret scanning sonar images of structure and swimming fish in incredible detail below your boat.

#### LIVESCOPE™ PLUS FORWARD MODE



Scout ahead of your boat to see what's happening in real time by scanning sonar images of structure and fish up to 200' away.

#### LIVESCOPE™ PLUS PERSPECTIVE MODE



An ideal sonar mode for shallow water, this mode lets you see under the water with a view from your perspective above the water.

### LIVESCOPE™ PLUS SCANNING SONAR SYSTEM

Part no: 010-03228-00 includes Perspective Mode Mount



Includes a compact GLS™ 10 sonar black box with LVS34 transducer and a simple plug-and-play Garmin Marine Network connector to install easily and integrate seamlessly with your compatible Garmin chartplotter<sup>1</sup>. With support for Forward, Down and Perspective mode views, now it's easier than ever to see the structure, bait and fish around your boat in real time. Available with Perspective Mode Mount, trolling motor barrel mount and shaft mount options.

### LIVESCOPE™ PLUS LVS34 TRANSDUCER

Part no: 010-02706-10



Easily upgrade your current LiveScope system black box (GLS 10 sonar module) with a new LVS34 transducer. Don't miss a thing with supported forward, down and perspective mode views and necessary mount.

Compatible with GPSMAP® 9000 chartplotter series, GPSMAP® 8400/GPSMAP® 8600 chartplotter series, GPSMAP® x2 Plus, GPSMAP® x3, ECHOMAP™ Ultra 2 combo, ECHOMAP™ Ultra combo, ECHOMAP™ UHD 7" and ECHOMAP™ UHD 9"

# LIVESCOPE™ XR SYSTEM



You didn't think it could get better, but it did with the extended range of the LiveScope XR System. It's the latest in LiveScope technology, now for coastal and open-water fishing. The XR transducer offers live scanning sonar up to 350' in saltwater and up to 500' in freshwater in three modes. Adjust the transducer to fit where you fish; use LiveScope™ Forward mode to see around your boat, LiveScope™ Down mode to see directly below your boat and Perspective mode for an overhead sonar view that's perfect for scouting open water or shorelines.



## LOOK DEEPER



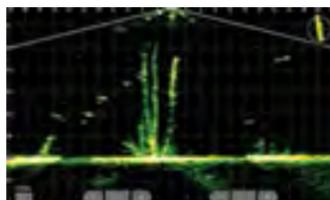
Explore the deep with extended-range, live-scanning sonar depths up to 500' in Freshwater and 350' in Saltwater.

## TAKE A CLOSE VIEW



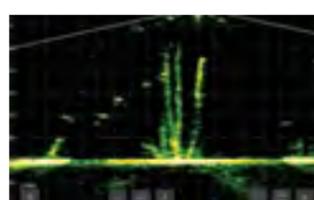
Find fish circling close to your boat. Compress range gives you clear views of waters around your hull.

## IMAGE STABILIZATION



A built-in stabilization system keeps the sonar image steady on your compatible chartplotter, even in rough conditions.

## VIVID COLOR PALETTES



Choose from seven vivid color options to see fish and structure with maximum contrast and clarity.



## LIVESCOPE™ XR LVS62 TRANSDUCER

010-02719-10

Want to optimize your existing LiveScope sonar's GLS™ 10 black box for coastal and open-water fishing? Just add the LVS62 transducer to your setup. Get all the detail and clarity your system is built to deliver.

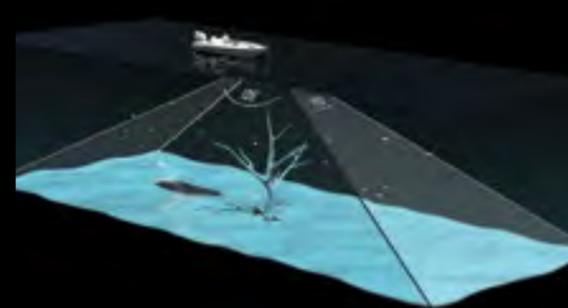
## LIVESCOPE™ XR SONAR SYSTEM

010-02719-00

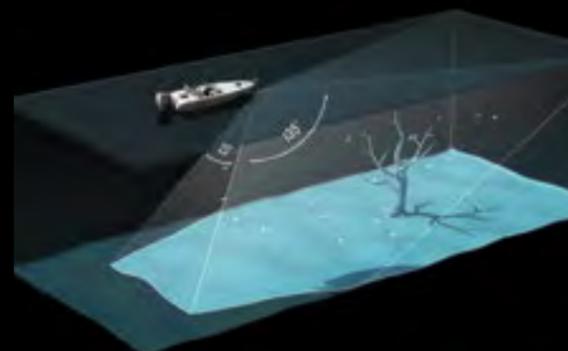
Includes a compact GLS 10 sonar black box with LVS62 transducer and offers easy installation with a plug-and-play Garmin Marine Network connector for seamless integration with your compatible Garmin chartplotter<sup>1</sup>. Now it's easier than ever to see the structure, bait and fish around your boat — in real time — with support for forward, down and perspective mode views.



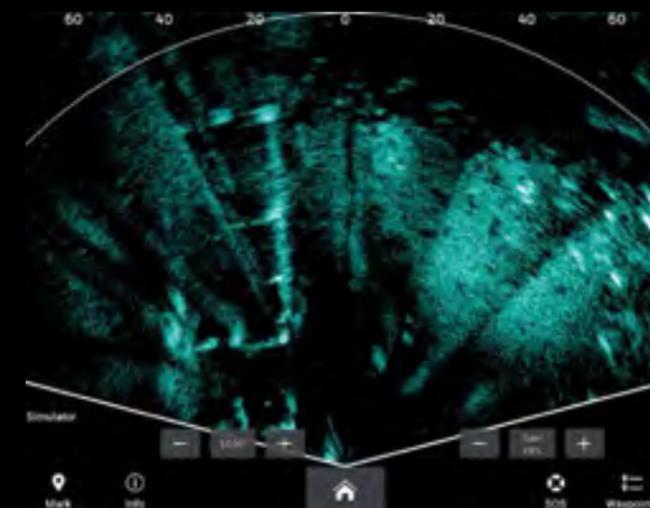
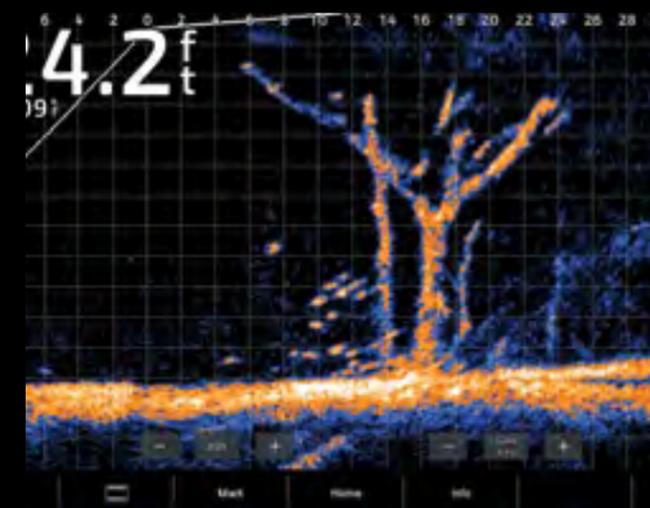
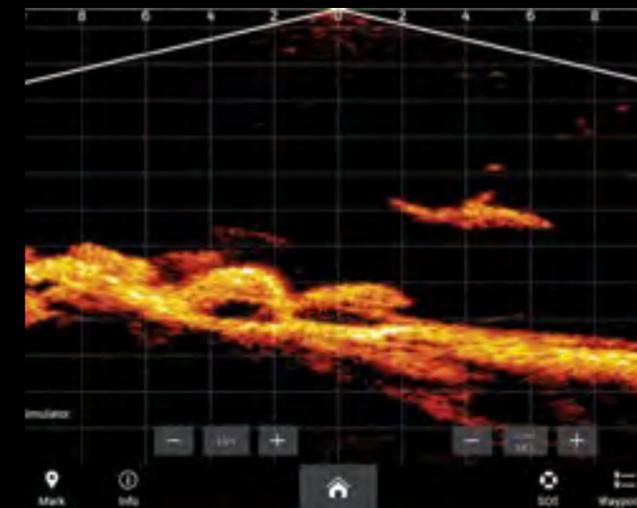
## LIVESCOPE™ DOWN



## LIVESCOPE™ FORWARD



## LIVESCOPE™ PERSPECTIVE MODE



<sup>1</sup>Compatible with GPSMAP® 9000 chartplotter series, GPSMAP® 8400/GPSMAP® 8600 chartplotter series, GPSMAP® x2 Plus, GPSMAP® x3, ECHOMAP™ Ultra 2 combo, ECHOMAP™ Ultra combo, ECHOMAP™ UHD 7" and ECHOMAP™ UHD 9"

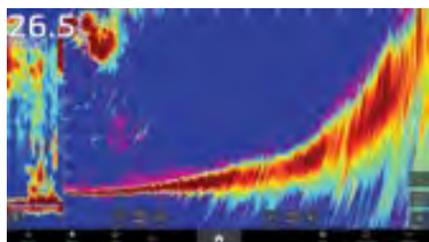
# PANOPTIX™ ALL-SEEING SONAR

Panoptix sonar is opening up a new world for serious anglers. It makes it possible to see fish and bait swimming, in real time, around or under your boat — even when the boat is not moving.

## PANOPTIX FORWARD

Includes three forward views: LiveVü™ Forward, RealVü™ 3D Forward and FrontVü™.

### LIVEVÜ FORWARD



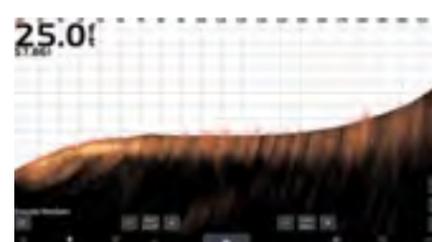
Provides a live sonar look at fish swimming and moving toward or away from the boat. Cast right at fish. See your lure. See fish react to your lure. See and feel the strike.

### REALVÜ 3D FORWARD



Scans the area in front of your boat, creating a forward-looking 3D view of the bottom, structure and fish<sup>1</sup>.

### FRONTVÜ

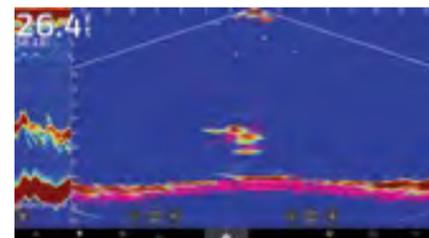


To help give you time to avoid collisions<sup>2</sup> with submerged obstacles, FrontVü shows underwater obstructions within a 300' range as you approach them in real time.

## PANOPTIX DOWN

Includes three downward views: LiveVü Down, RealVü 3D Historical and RealVü 3D Down.

### LIVEVÜ DOWN



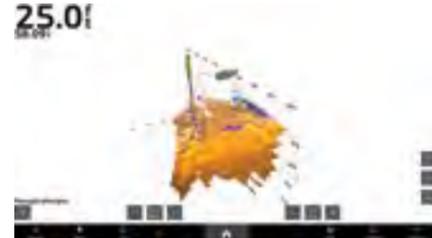
Shows real-time moving sonar images of small baitfish and large target fish swimming below your boat and pinpoints their distance left or right and their depths.

### REALVÜ 3D HISTORICAL



Scrolls through sonar data as the boat moves to show the history of the entire water column from the bottom to the surface and all the fish in between.

### REALVÜ 3D DOWN



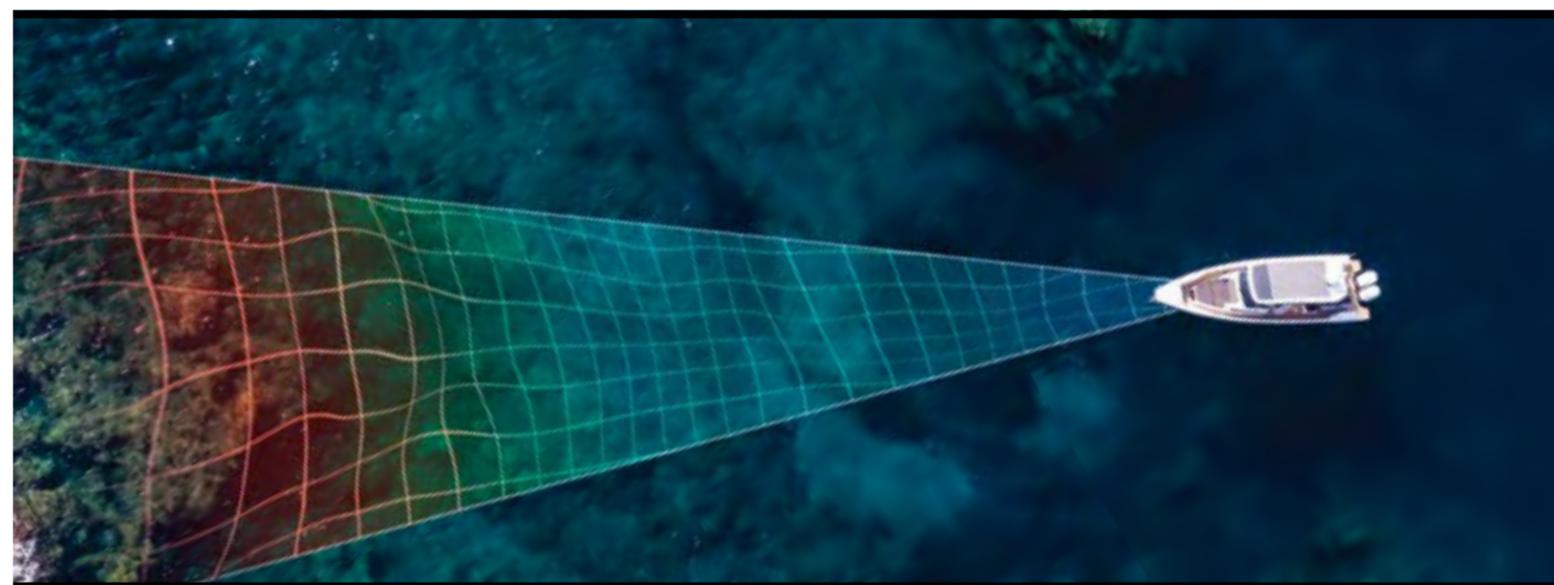
Scans below the boat — front to back and side to side — to construct a full 3D view of the area under the boat, letting you see contour changes, fish and structure, even while stationary.

# PANOPTIX™ ALL-SEEING SONAR

## PANOPTIX FRONTVÜ™ SONAR



Multibeam thru-hull transducer with premium FrontVü forward-looking sonar helps you avoid running aground<sup>1</sup> by displaying the bottom ahead of your boat in real time on your chartplotter. It also includes LiveVü™ Forward sonar to show you fish — even divers — swimming in real time under and ahead of your boat with a 300' forward range.



## THE LINEUP

	PS22-TR 010-01945-00	PS30 010-01284-00	PS31 010-01284-01	PS51-TH 010-01753-00	PS60 010-01406-00	PS70 010-02768-00	PS70 010-02768-10
RealVü™ 3D Down		•			•		
RealVü™ 3D Historical		•			•	•	•
LiveVü™ Down	•	•			•	•	•
RealVü™ 3D Forward			•				
LiveVü™ Forward	•		•	•			
FrontVü™ Forward	•		•	•			
Independent Power Connection	•	•	•	•	•	•	•
Transom Mount Included		•	• <sup>2</sup>				
Trolling Motor Mount Included	•		•				

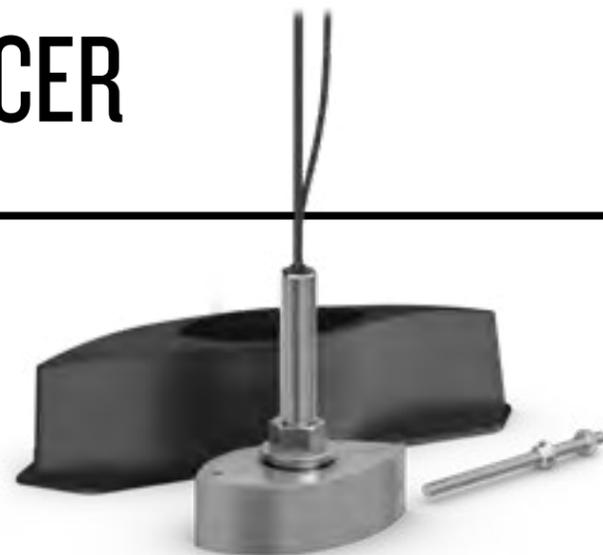
<sup>1</sup>The forward-facing transom mount should be mounted in a location that is out of the water as speeds over 17 knots. If located below the waterline, cruising speeds over 21 knots should be avoided. • <sup>2</sup>The ability to effectively avoid running aground with FrontVü sonar decreases as speed rises above 8 knots

<sup>1</sup>The ability to effectively avoid running aground with FrontVü sonar decreases as speed rises above 8 knots • <sup>2</sup>The forward-facing transom mount should be mounted in a location that is out of the water as speeds over 17 knots. If located below the waterline, cruising speeds over 21 knots should be avoided.

# PANOPTIX™ PS70 THRU-HULL TRANSDUCER

See fish live. Catch fish deep. The Panoptix™ PS70 thru-hull transducer is powered by Garmin RapidReturn™ sonar, which gives you live sonar views up to 1,000' below the surface with 1-kW power output for strong sonar penetration through the water. As the fastest live sonar at 1,000', images update at a rate that's 6-8 times faster than other competitive systems. Locate bait and fish quickly with a wide 120-degree by 8-degree sonar beam that covers huge areas of water.

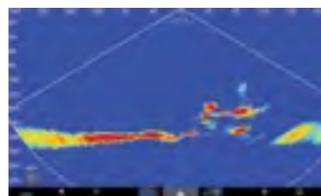
Part no: 010-02768-00 PS70-TH with fairing block; 010-02768-10 PS70-TH transducer only



## FOUR EASY-TO-UNDERSTAND SONAR MODES

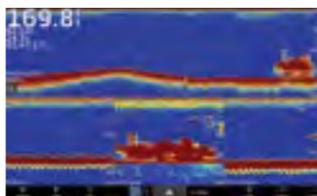
Select the view that works best for your circumstance.

### LIVEŪ™ DOWN



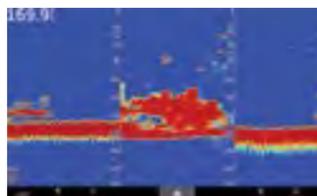
See real-time live sonar images up to 1,000'. With RapidReturn, anglers can see small baitfish and target game fish in real time.

### TRADITIONAL SONAR



View crisp, clear fish arches with excellent separation of targets under the boat.

### TRIPLE BEAM SONAR



Get a three-way traditional sonar split that gives sonar returns from the port and starboard directions, as well as targets directly under the boat, in an easy-to-understand traditional sonar view. Adjust the beam angles to fine-tune your 3 columns of sonar data.

### REALŪ™ 3D



Historical scanning technology helps find fish and build a map of the ocean floor while your boat is moving. It shows the entire water column you have passed over in 3D, from the bottom to the surface and all fish in between.

## QUICKDRAW CONTOURS

Survey the ocean floor in great detail. New QuickDraw Contours improvements allow you to survey wide areas at depths up to 1,000' — and instantly create personalized fishing maps on-screen with 1' contours as you fish.



# ULTRA HIGH-DEFINITION SCANNING SONAR

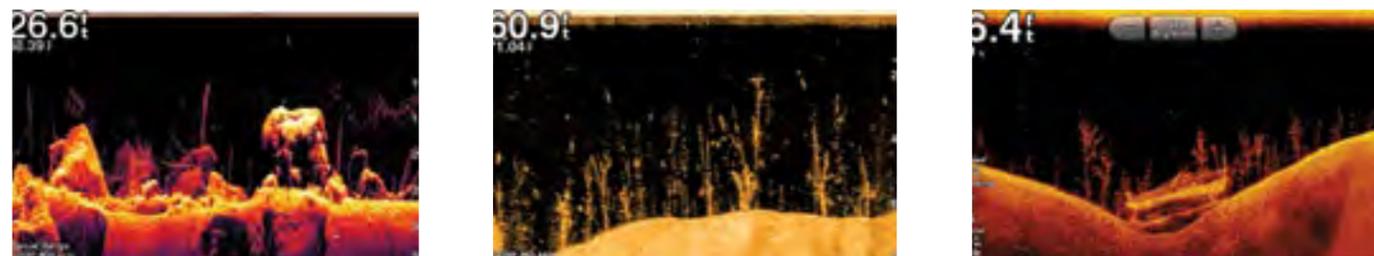
## SEE EVERYTHING

Clarity and detail are redefined with the Ultra High-Definition scanning sonar system. It delivers greater resolution by putting more power on targets with a higher frequency range than conventional marine sonar technologies.



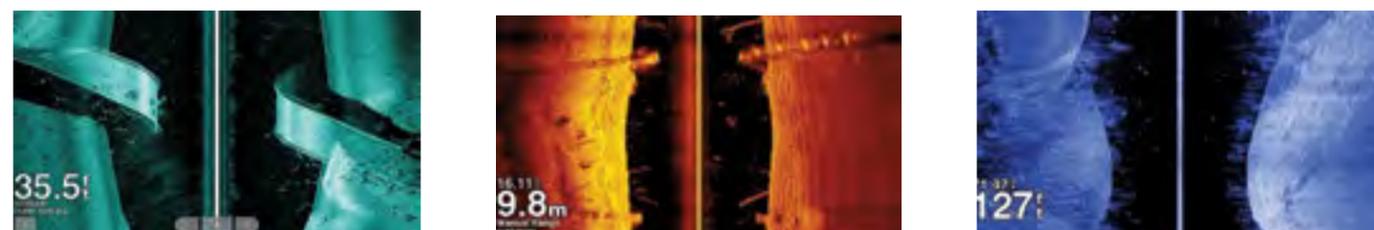
## UHD CLEARVÜ

ClearVü™ is high-frequency sonar that delivers an amazingly clear picture of what's under your boat. ClearVü produces an ultra-clear image for a more detailed representation of objects, structure and fish.



## UHD SIDEVÜ

SideVü™ provides a highly detailed, high-resolution image of structure and fish off to either side of your boat. It's excellent for scouting, finding fish and the right types of structures for successful fishing.



## VIVID COLOR PALETTE

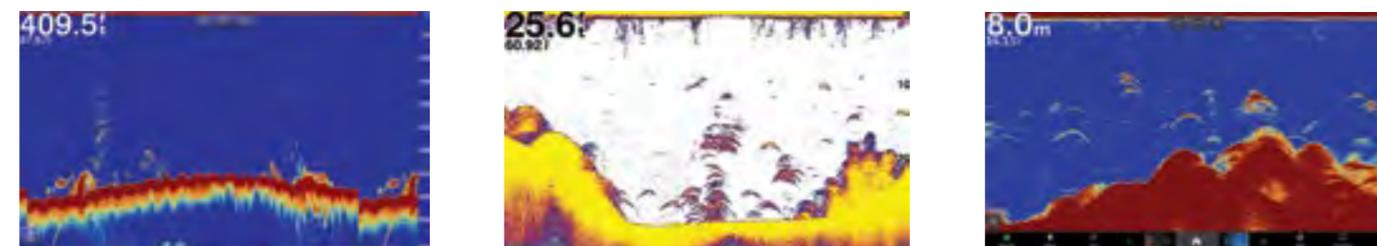
See fish and structure in colorful detail with vivid color palettes on your scanning sonar.



# TRADITIONAL CHIRP SONAR

## TRADITIONAL CHIRP SONAR

Garmin traditional CHIRP sonar sends a continuous sweep of frequencies ranging from low to high. This sweep of frequencies provides a wide range of data to create an amazingly clear, high-resolution image.



# CHARTS AND MAPS

## THE BEST OF GARMIN WITH THE BEST OF NAVIONICS®

Whether you're adventuring on the high seas, cruising an intercoastal waterway, fishing on your new favorite freshwater lake or piloting a commercial workboat, your chartplotter deserves the best, most up-to-date marine charts and navigation data. That's the advantage you get with the detail-rich content in our full line of marine mapping solutions. With selectable chart layers, overlays and more, our products help mariners all over the world guide their boats in and out of port with confidence. Map coverage areas are aligned for Garmin- and Navionics-branded products — with combined coastal and lake content that makes it simple to access the map areas you want. See all the best places that water can take you. And plot your course with the world's #1 choice in marine mapping<sup>1</sup>.



## NAVIONICS® BOATING APP

NAVIONICS  
A Garmin Brand



For cruising, fishing, sailing, diving and all your other activities on the water, the Navionics Boating app brings detailed offshore marine and inland lake charts to your mobile device, so they're on hand wherever you go. As a companion to the chartplotter or on its own, the app delivers detailed chart content and useful functionality — including night mode display — in a convenient and easy-to-use format.

In addition to all the great chart content, your 1-year renewable subscription lets you access daily updates and powerful advanced features before, during and after your trip.

### SPECIAL NAVIONICS BOATING APP FEATURES

Relief shading overlay uses color and shadow to provide boat owners with a better understanding of bottom topography for improved fishing and diving

A night mode display option optimizes viewing in low-light conditions and helps preserve your night vision

Auto Guidance+™ technology helps you start your trip with a suggested route from point A to B, based on chart data and navigation aids<sup>1</sup>

The plotter sync feature<sup>2</sup> allows compatible chartplotter owners to transfer routes and markers, update chart layers and more — to and from the Navionics Boating app

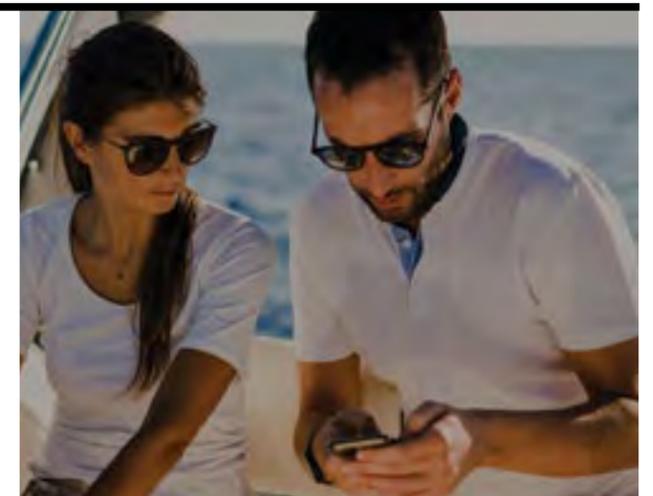
The connections feature keeps you in touch with your friends and fellow boaters. Share your live location and tracks, routes and markers

Local edits from Navionics Boating app users and the ActiveCaptain® Community are integrated within the app

The SonarChart™ Live mapping feature lets you create your own 1' contour HD bathymetry maps in real time while navigating

Access real-time weather data, daily and hourly forecasts, as well as wind, weather buoys, tides and currents overlaid on your map

The Navionics Boating app is available as a separate purchase for Apple® and Android™ devices and offers a free trial before subscribing



<sup>1</sup>Based on 2024 reported sales  
See current Garmin/Navionics marine charts catalog for coverage areas and pricing.

<sup>2</sup>Auto Guidance+ is for planning purposes only and does not replace safe navigation operations  
<sup>3</sup>Requires an active subscription with an overlapping coverage area on the Navionics Boating app  
Apple is a trademark of Apple Inc., registered in the U.S. and other countries · Android is a trademark of Google LLC.

# GARMIN NAVIONICS+™ CHARTS

Worldwide coverage available



# GARMIN NAVIONICS VISION+™ CHARTS

Worldwide coverage available

## INTEGRATED CHARTS AND MAPS FOR GARMIN CHARTPLOTTERS

Navigate with greater peace of mind and increased awareness on the water. Garmin Navionics+™ marine charts — with integrated Garmin and Navionics® content — brings a vibrant color palette and popular Navionics-style chart formatting to your chartplotter<sup>1</sup>. For offshore or inland waters, this all-in-one solution offers detail-rich mapping of coastal features, lakes, rivers and more — with shaded depth contours and access to daily updates via the ActiveCaptain® app. Advanced Auto Guidance+ technology<sup>2</sup> offers a suggested dock-to-dock path to your destination. And multiple shading options aid in shallow water navigation and make it easy to select depth ranges for the best fishing spots. Downloadable NOAA raster imagery<sup>3</sup> is also available for those who want the familiar look of paper charts. And with select GPSMAP® or ECHOMAP™ series chartplotters, Garmin Navionics+ mapping is available built-in.

### ADVANCED CHART DETAIL



Integrated Garmin and Navionics content, with an updated color palette and Navionics style appearance, offers exceptional coverage, clarity and detail on your chartplotter.

### DETAILED CONTOURS



Up to 1' contours provide a more accurate depiction of bottom structure so you can catch more fish and navigate with confidence.

### AUTO GUIDANCE+



For smoother, more detailed routes, built-in Auto Guidance+ technology<sup>2</sup> uses your desired depth and overhead clearance, along with chart data and frequently traveled routes, to quickly calculate a suggested path to follow from dock to dock.

### DEPTH RANGE SHADING



Select high-resolution depth range shading for up to 10 depth ranges to view your target depth at a glance.

### NIGHT MODE



Get a better view of important navigation features at night with improved contrast and a muted color palette that reduces eye strain after dark.

### RASTER CHARTS

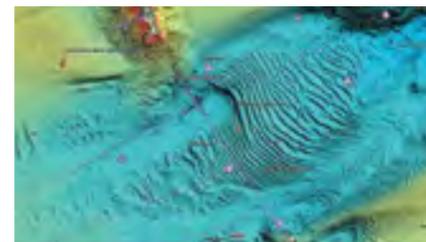


Download NOAA raster charts<sup>3</sup> via the ActiveCaptain app to your compatible smartphone, then sync to your chartplotter.

## PREMIUM CHARTS AND MAPS FOR GARMIN CHARTPLOTTERS

Our premium mapping solution for Garmin devices adds even more graphical content and visual dimension to the standard Garmin Navionics+™ feature set. Covering offshore and inland waters, this all-in-one mapping package lets you navigate seamlessly with such additional on-screen aids as high-resolution relief shading, 3D perspective views, and overhead visual reference from aerial photography and satellite imagery. Enhancing your situational awareness, these extra features help you navigate unfamiliar waters, marinas, shorelines, ports and more with confidence.

### HIGH-RESOLUTION RELIEF SHADING



Highly detailed shading combines color and shadow to provide an easy-to-interpret, clearer view of bottom structure than contour lines alone.

### HIGH-RESOLUTION SATELLITE IMAGERY



Use the ActiveCaptain® app to download high-resolution satellite imagery overlaid with navigational charts. Get a realistic view of your surroundings — ideal for entering unfamiliar harbors or ports.

### AERIAL PHOTOS



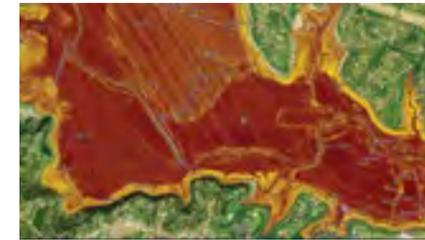
Aerial and surface photos of ports, bridges, docks, navigational landmarks and more provide a better sense of your surroundings above the waterline.

### SIDE SCAN IMAGES



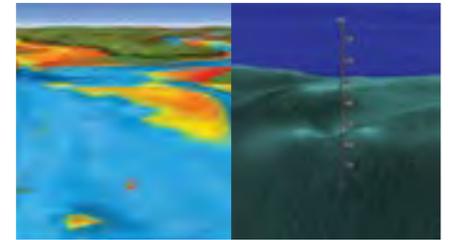
Check out submerged features such as fallen timber, fish attractors, wrecks, potential hazards and more.

### SONAR IMAGERY



The sonar imagery feature, available via the ActiveCaptain® app, reveals bottom hardness clearly and in contrasting color, highlighting both subtle and dramatic transition areas on select lakes.

### 3D VIEWS



MarinerEye and FishEye views provide 3D representations of the surrounding area above and below the waterline.

### DYNAMIC LAKE LEVEL



For inland lake navigation, you can adjust the map to the current water levels to see which areas are accessible or too shallow to explore.

<sup>1</sup>Garmin Navionics+ and Garmin Navionics Vision+™ are designed for use on compatible Garmin devices only. Other brands may utilize Navionics+™ or Navionics Platinum+™ products. • <sup>2</sup>Auto Guidance+ is for planning purposes only and does not replace safe navigation operations • <sup>3</sup>Raster charts can only be displayed on GPSMAP series chartplotters and/or the ActiveCaptain smart-device app

Not all map features will display on all devices, particularly legacy devices. As engineering enhancements are ongoing, new features may not display on such legacy products.

## INTEGRATED CHARTS AND MAPS FOR A WIDE RANGE OF THIRD-PARTY CHARTPLOTTERS

It's all about knowing your way on the water — with marine charts and maps you can trust. That's why the boaters who trust and rely on the Navionics brand have made it the world's #1 marine mapping provider<sup>1</sup>. Seamlessly combining offshore and inland content, this all-in-one solution offers clear, reliable charts and maps for a wide range of chartplotter brands. Navionics+ and Navionics Platinum+™ mapping products, provided on microSD™ cards for easy installation on your compatible marine device, are now available for purchase on our Garmin.com website. The same detailed marine and lake charts are also available with the Navionics® Boating app on your Apple® or Android™ mobile device. Simply download the app and purchase your charts of choice right from your phone. Plus, the app's plotter sync feature also enables you to transfer routes and markers, as well as upload sonar logs, update charts and more between your plotter card and the Navionics Boating app.

## SAVE WITH MARINE CHART SUBSCRIPTIONS

An included one-year subscription with your chart purchase provides access to daily updates, advanced features and so much more. At the end of your yearly subscription period, you can renew for additional one-year periods — at a price that's typically 50% less than the cost of a new GPS card<sup>2</sup>. Activate your subscription with the Navionics chart installer software or by using the Plotter Sync feature of the Navionics Boating app to activate and update charts wirelessly<sup>3</sup>.

## NAVIONICS+

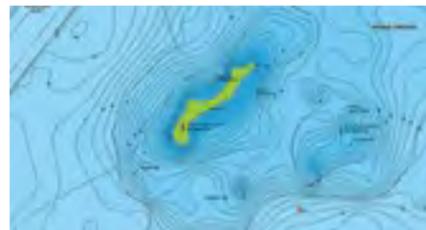
For offshore or inland waters, this all-in-one solution offers detail-rich integrated mapping, up to 1' HD contours, advanced features<sup>4</sup> such as dock-to-dock route guidance technology<sup>5</sup> and access to daily updates via the Navionics Chart Installer software.

### NAUTICAL CHART



Essential navigational reference detail for cruising, sailing and fishing: port plans, safety depth contours, marine services, tides and currents, and navigation aids.

### SONARCHART™ HD BATHYMETRY



For improved fishing and navigation, SonarChart™ HD bathymetry maps display up to 1' contours for a more detailed depiction of bottom structure.

### COMMUNITY EDITS



Download the Community Edits content layer to any Navionics card and view this valuable local information, contributed by Navionics Boating app users, on your compatible chartplotter.

### DOCK-TO-DOCK ROUTE GUIDANCE



Navionics advanced route guidance technology<sup>4</sup> uses your boat settings, along with chart data and frequently traveled routes, to calculate a suggested path to follow from dock to dock.

### SONARCHART LIVE MAPPING FEATURE



Create your own maps on the fly. Watch new up to 1' HD bathymetry maps develop in real time as your boat moves along the water.

### ADVANCED MAP OPTIONS



Change the way you view Navionics charts and focus on the details that matter most to you. Highlight shallow areas, adjust contour density or select a fishing range.

## PLATINUM+

### INTEGRATED COASTAL AND INLAND LAKES COVERAGE

A comprehensive, all-in-one map solution, Platinum+ charts combine premium marine content on oceans, major rivers and seas with freshwater inland mapping for more than 45,000 lakes worldwide.

## PLATINUM+ OVERLAYS AND FEATURES

Designed with the most demanding boaters and serious anglers in mind, all Navionics®+ marine content is enhanced with additional viewing options that take your boating experience to the next level.

### HIGH-RESOLUTION RELIEF SHADING



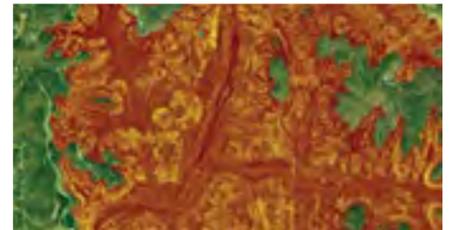
Download relief shading using the Navionics Chart Installer software and bring bottom detail to life, from shallow flats to deep offshore canyons. See it all in a vivid, colorful representation that helps boaters gain a better understanding of bottom topography.

### HIGH-RESOLUTION SATELLITE IMAGERY



Download high-resolution satellite imagery to get a realistic view of your surroundings — ideal for entering unfamiliar harbors or ports.

### SONAR IMAGERY



To help find the best fishing spots, download sonar imagery using the Navionics Chart Installer software. These maps are generated from proprietary multibeam surveys and reveal bottom hardness and structural characteristics in contrasting color detail.

### AERIAL PHOTOS



Aerial and surface photos of ports, marinas, bridges, docks, boat ramps, dams and navigational landmarks offer superior situational awareness.

### 3D VIEW



Unique 3D views provide additional perspective, both above and below the water.



NOTE: Navionics+ and Platinum+ cards are not compatible with Garmin chartplotters • <sup>1</sup>Based on 2024 reported sales • <sup>2</sup>Applies only to GPS card subscriptions, not app subscriptions • <sup>3</sup>Requires an active subscription with an overlapping coverage area on the Navionics Boating app • <sup>4</sup>Compatibility with Navionics features varies depending on the chartplotter model • <sup>5</sup>Route guidance is for planning purposes only and does not replace safe navigation operations • Apple is a trademark of Apple Inc., registered in the U.S. and other countries. • Android is a trademark of Google LLC.

# BUILD, MANAGE AND CONTROL



## BUILD A COMPLETE ONBOARD SYSTEM

The Garmin Marine Network and NMEA 2000® network allow you to easily view multiple functions, such as chartplotter, radar, sonar, AIS, on one or more displays. All Garmin Marine Network and NMEA 2000 devices come with an easy plug-and-play setup. The system automatically detects the devices in the network and makes them ready to use.

### NMEA 2000 CONNECTIVITY

Utilize NMEA 2000 to connect Fusion® Audio-enabled systems, AIS, VHF, autopilots, engine data, fuel flow sensors and wind sensors.

### GARMIN MARINE NETWORK

Utilize Garmin Marine Network to connect Garmin marine electronics such as sonar, radar, monitoring cameras, video data, and multiple MFDs and chartplotters.

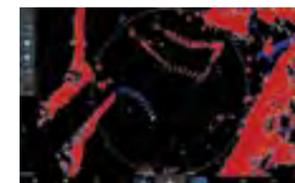
#### WEATHER



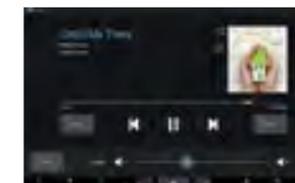
#### CAMERA



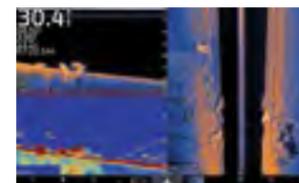
#### RADAR



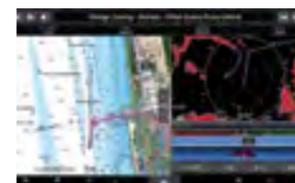
#### FUSION AUDIO



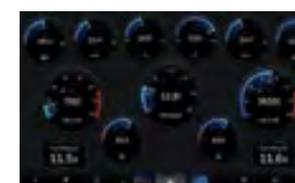
#### SONAR



#### AUTOPILOT



#### ENGINE DATA



#### WIND SENSOR



## CONTROL. EVERYTHING.

### ONEHELM™

Our integrated solution is designed to work with marine products manufactured by third-party companies to bring you the power and convenience of controlling onboard boat systems such as digital switching, lighting, stabilization and more. It's all in one simple, convenient control center – the screen of your Garmin MFD.



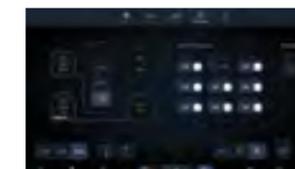
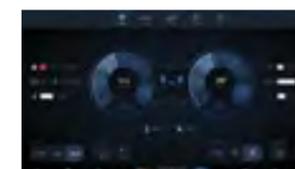
### ONDECK™ SYSTEM

Keep tabs on systems such as battery, shore power, bilge or saltwater pumps and receive alerts if a security sensor is triggered or if your boat is moved from its GPS geofenced area. Get 24/7 peace of mind with OnDeck technology onboard<sup>1</sup>.



### GARMIN EMPIRBUS™ DIGITAL INTEGRATIONS

These innovative and intelligent products, solutions and services provide a complete suite of embedded systems, power supply and power distribution, creating the backbone for complete digital control and smart boat features. EmpirBus components connected with Garmin MFDs (sold separately) allow cruisers, sailors and anglers to control virtually any device on their vessel easily – from propulsion to pumps, air conditioning to infotainment. This connectivity enhances situational awareness and helps make time on the water even more enjoyable.



<sup>1</sup>An active subscription plan is required. Both the OnDeck Hub and user's device must have connectivity to a 3G/4G network.

# ACTIVECAPTAIN® APP



Give yourself the advantages of the ultimate connected boating experience. Download the free all-in-one ActiveCaptain app. It provides a powerful connection to your compatible Garmin chartplotter, charts, maps and the community. Wherever you are, you can have convenient access to your marine mapping, including a night mode map view that's optimized for low light, activate chart subscriptions, purchase and update maps and charts, plan your trips and access the Garmin Quickdraw™ Contours Community.



## SPECIAL ACTIVECAPTAIN FEATURES

Use the built-in OneChart™ feature on the ActiveCaptain app to access and wirelessly update your compatible charts from your compatible smartphone directly to your chartplotter

The ActiveCaptain app allows you to download premium content, such as high-resolution relief shading and satellite imagery, for your Garmin Navionics Vision+™ charts.

Receive smart notifications, such as calls and texts, on your chartplotter display when paired with the app

Download software updates and notifications directly from the app to your Garmin devices

Connect to fellow boaters with the ActiveCaptain community for up-to-date feedback on marinas and other points of interest

Make, save and transfer routes and waypoints between the app and chartplotter — with zero button presses<sup>1</sup>

Easily upload and download the latest Garmin Quickdraw Contours content from the community — with zero button presses<sup>1</sup>

View and control your chartplotter from your compatible smartphone or tablet

Use with the OnDeck™ remote connectivity system (sold separately) to track, monitor and control connected switches on your boat from virtually anywhere

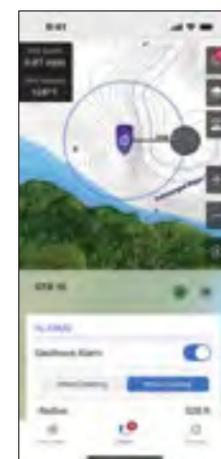


# REMOTE CONNECTIVITY SOLUTIONS

## ONDECK™ SYSTEM

When paired with the ActiveCaptain® app on your compatible smartphone, the OnDeck remote connectivity solution lets you track, monitor and control multiple switches on your boat from virtually anywhere. Keep tabs on systems such as battery, shore power, bilge or saltwater pumps, and receive alerts if a security sensor is triggered or if your boat is moved from its GPS geo-fenced area. Get 24/7 peace of mind with OnDeck technology onboard<sup>1</sup>.

### TRACK



Be the first to know if a security sensor has been triggered, or if your boat has been moved. The internal GPS sensor updates every 15 or 30 minutes, depending on power status, and will send text alerts<sup>1</sup> if your boat leaves the geofenced area.

### MONITOR



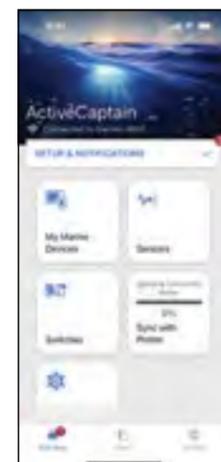
Get updates<sup>1</sup> on your boat's battery status, bilge activity, shore power, temperature changes and more. Set up alarm notifications in the ActiveCaptain app.

### CONTROL



Control any number of NMEA 2000® latching or momentary switches, including battery chargers, ice makers and more.

### ACTIVECAPTAIN APP



Download the ActiveCaptain app to your compatible smartphone or tablet to manage your vessel. It's where you can set up alarm notifications, take control of your boat and so much more<sup>1</sup>.

### STORE DATA



Securely collect vessel data with the OnDeck Hub and store it in the cloud for up to 30 days.

### ONDECK HUB



The OnDeck Hub uses 3G/4G coverage.

<sup>1</sup>Zero button presses applies to GPSMAP® chartplotters

<sup>1</sup>An active subscription plan is required. Both the OnDeck Hub and user's device must have connectivity to 3G/4G network.



AUDIO

# FUSION® MARINE ENTERTAINMENT



## FUSION® MARINE AUDIO

Enhance your time on the water with world-class marine audio entertainment products, including marine stereos, speakers, subwoofers and amplifiers. Our determination to continually innovate brings superior capabilities to our products, setting a new benchmark for marine audio entertainment.

## FUSION DIGITAL SIGNAL PROCESSING (DSP)

A technically superior listening experience made simple, Fusion DSP optimizes the audio signal delivered to your Fusion entertainment system with preset profiles that can be set up for each audio zone on board. The result is superior sound quality at all volumes, in every listening environment.

## WI-FI® AUDIO STREAMING WITH Apple AirPlay® 2

Wi-Fi audio streaming provides higher-quality audio with a faster data transfer rate than BLUETOOTH® technology. With Apple AirPlay 2, you can seamlessly stream audio from your compatible Apple® device to multiple Apollo™ Series stereos<sup>1</sup> connected on the same network.



# FUSION® MARINE ENTERTAINMENT

## FUSION PARTYBUS™ NETWORK



Connect multiple Apollo Series stereos<sup>1</sup> to the same network and enjoy integrated control of your boat's entire audio system. Key functionalities include:

### STEREO GROUPING

Play the same synchronized audio source across multiple grouped stereos.

### POWER OPTIONS

Turn on or off any stereo on the network from another stereo or remote.

### VOLUME CONTROL

Individual or group volume control.

### HOME ZONE

Easy access to audio control where the stereo is installed.

## MULTI-ZONE™ TECHNOLOGY

Control your audio in up to four separate audio zones aboard your boat with Multi-Zone technology. Adjust the balance, subwoofer and volume levels — and name each zone for quick identification

## MARINE PROTECTION

Designed specifically for use in the marine environment, Fusion products are perfectly at home on the water. They're made to withstand the elements and undergo ingress protection (IP) testing, pressure testing for speakers and subwoofers (ISO12216) and salt fog, UV, humidity and temperature testing.

## FUSION AUDIO CONTROL

Link your Garmin MFD and Fusion marine stereo with Fusion-Link™ using an Ethernet or NMEA 2000® network wired connection for integrated audio control at the helm. Download the Fusion Audio app from the App Store® or Google Play Store™ to control your stereo from a compatible Apple® or Android™ device. You can also wirelessly control your stereo from a compatible Garmin smartwatch by downloading the Fusion® Audio app from the Connect IQ™ store app.



<sup>1</sup>MS-RA670/MS-WB675 will get Apple AirPlay 2, PartyBus and over-the-air software updates when connected via Ethernet to an external wireless router (sold separately), Garmin MFD or Apollo Series stereo network enabled with Wi-Fi technology. • Wi-Fi is a registered trademark of the Wi-Fi Alliance. The Bluetooth word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. and any use of such marks by Garmin is under license. AirPlay and Apple are trademarks of Apple Inc., registered in the U.S. and other countries. Android is a trademark of Google LLC. Google Play and the Google Play logo are trademarks of Google LLC.

<sup>1</sup>MS-RA670/MS-WB675 will get Apple AirPlay 2, PartyBus and over-the-air software updates when connected via Ethernet to an external wireless router (sold separately), Garmin MFD or Apollo Series stereo network enabled with Wi-Fi technology. • Wi-Fi is a registered trademark of the Wi-Fi Alliance. The Bluetooth word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. and any use of such marks by Garmin is under license. AirPlay and Apple are trademarks of Apple Inc., registered in the U.S. and other countries. Android is a trademark of Google LLC. Google Play and the Google Play logo are trademarks of Google LLC.

# FUSION® STEREO

# FUSION® STEREO

## APOLLO™ MS-RA770



The world's most awarded marine stereo features a 4.3" color touchscreen display with built-in Wi-Fi® and Apple AirPlay® 2 for seamless high-quality audio streaming. Enjoy superior sound quality with Fusion DSP. PartyBus™ via Ethernet or Wi-Fi® gives you the freedom of musical choice across your boat with Multi-Zone™ technology in four zones. Easily keep your stereo up to date with the latest features via over-the-air software updates. The MS-RA770 supports audio control from compatible MFDs, smart devices and Garmin smartwatches.

**Sources:** Apple AirPlay 2 / Universal Plug and Play (UPnP) / BLUETOOTH® / digital optical in / USB / iPhone®, iPod® / AUX x2 / MTP / AM, FM radio / SiriusXM® ready (U.S. only, requires optional SiriusXM® Connect vehicle tuner) / DAB+ Ready (available in Europe and Australia only, requires MS-DAB100A module)

## APOLLO™ MS-RA670



The MS-RA670 reembodies the award-winning innovation of the MS-RA770 in a more compact form factor. It includes a 2.7" optically bonded color LCD, Fusion DSP for superior sound quality and PartyBus via Ethernet for freedom of musical choice across your boat with Multi-Zone technology in three zones. When the MS-RA670 is connected via Ethernet to an external wireless router (sold separately), Garmin MFD or Apollo Series stereo network enabled with Wi-Fi technology, it gains Wi-Fi audio streaming with Apple AirPlay 2 and over-the-air software updates. The MS-RA670 supports audio control from compatible MFDs, smart devices and Garmin smartwatches.

**Sources:** Apple AirPlay 2 / Universal Plug and Play (UPnP) / BLUETOOTH / digital optical in / USB / iPhone, iPod / AUX x1 / MTP / AM, FM radio / SiriusXM ready (U.S. only, requires optional SiriusXM Connect vehicle tuner) / DAB+ ready (available in Europe and Australia only, requires MS-DAB100A module)

## MS-RA210



The MS-RA210 marine stereo is a stylish option for your boat that incorporates some Apollo Series' features, including a 2.7" optically bonded color LCD, Fusion DSP and Multi-Zone™ technology that gives you the option to control your audio in two zones. It supports audio control from compatible MFDs, smart devices and Garmin smartwatches.

**Sources:** BLUETOOTH / USB / iPhone, iPod / AUX x1 / MTP / AM, FM radio / SiriusXM ready (U.S. only, requires optional SiriusXM Connect vehicle tuner) / DAB+ ready (available in Europe and Australia only, requires MS-DAB100A module)

## MS-RA70 / MS-RA70N / MS-RA70NSX



Designed to seamlessly fit existing DIN-sized stereo cutouts, the RA70 Series stereos are an easy-to-install option for upgrading your onboard audio entertainment system. They feature a 2.6" optically bonded dot matrix LCD and Multi-Zone technology that gives you audio control in two zones. The MS-RA70 supports audio control from compatible devices and Garmin smartwatches, while the MS-RA70N adds NMEA 2000® connectivity for MFD integration and the MS-RA70NSX adds NMEA 2000 connectivity and SiriusXM® support.

**Sources:** BLUETOOTH / USB / iPhone, iPod / AUX x1 / AOA / AM, FM radio  
MS-RA70NSX only: SiriusXM ready (U.S. only, requires optional SiriusXM Connect vehicle tuner)

MS-RA70 and MS-RA70N only: DAB+ ready (available in Europe and Australia only, requires MS-DAB100A module)

## APOLLO™ MS-WB675



Designed to save space at the helm while offering superior quality audio on board, the MS-WB675 is a compact hideaway stereo capable of being mounted inside storage lockers, helm consoles and other concealed compartments. Features include Fusion DSP and PartyBus via Ethernet for freedom of musical choice across your boat with Multi-Zone technology in four zones. When the MS-WB675 is connected via Ethernet to an external wireless router (sold separately), Garmin MFD or Apollo Series stereo network enabled with Wi-Fi technology, it will gain Wi-Fi audio streaming with Apple AirPlay 2 and over-the-air software updates. The MS-WB675 is designed to integrate with compatible Garmin MFDs and Fusion wired remotes such as the MS-ERX400.

**Sources:** Apple AirPlay 2 / Universal Plug and Play (UPnP) / BLUETOOTH / digital optical in / USB / iPhone, iPod / AUX x1 / MTP / AM, FM radio / SiriusXM ready (U.S. only, requires optional SiriusXM Connect vehicle tuner) / DAB+ ready (available in Europe and Australia only, requires MS-DAB100A module)

## APOLLO™ MS-SRX400



A perfect companion to the MS-RA770, the MS-SRX400 zone stereo combines premium design and superior sound in a compact form factor. It features a 2.7" optically bonded color LCD and built-in Wi-Fi and Apple AirPlay 2 for seamless high-quality audio streaming. Enjoy superior sound quality with Fusion DSP. PartyBus via Ethernet or Wi-Fi gives you the freedom of musical choice across your boat. Easily keep your stereo up to date with the latest features via over-the-air software updates. The MS-SRX400 supports audio control from compatible MFDs and smart devices.

**Sources:** Apple AirPlay 2 / Universal Plug and Play (UPnP) / BLUETOOTH / AM, FM radio

## MS-BB100



Designed to save space at the helm, the MS-BB100 is a compact black box stereo capable of being hidden away in the dash or mounted inside storage lockers, helm consoles and other concealed compartments. Featuring Multi-Zone technology, it gives you the option to control your audio in two zones and supports audio control from compatible MFDs, smart devices and Garmin smartwatches. A wired remote is included, allowing you to control the MS-BB100 while occupying minimal dash space at the helm.

**Sources:** BLUETOOTH / USB / iPhone, iPod / AUX x1 / AOA / AM, FM radio / DAB+ ready (available in Europe and Australia only, requires MS-DAB100A module)

## MS-RA60



This modern, compact and economical marine stereo features a 2.3" perimeter bonded monochrome LCD, Multi-Zone technology that gives you the option to control your audio in two zones and support for audio control from compatible smart devices and Garmin smartwatches. Easily keep your stereo up to date with the latest features via over-the-air software updates from the Fusion Audio mobile app on your compatible device.

**Sources:** BLUETOOTH / AUX x1 / AM, FM radio / DAB+ (available in Europe and Australia only)

# FUSION® STEREO AND REMOTES

## PANEL-STEREO



This plug-and-play audio solution combines a stereo, speaker and amplifier into an all-in-one unit. It offers preconfigured DSP for an enhanced listening experience; an optimally tuned enclosure, two 3" speakers; and a passive bass radiator. It supports audio control from compatible smart devices and Garmin smartwatches and comes as an indoor model with cloth grille or an outdoor model with UV-tested plastic grille.

**Sources:** BLUETOOTH® / USB / iPhone®, iPad® / AUX x2 / AOA / AM, FM radio

## APOLLO™ MS-ERX400



Sleek, compact and easy to install, the MS-ERX400 wired remote allows you to add intuitive and integrated audio control to any zone on your boat. It features a 2.7" optically bonded color LCD and full PartyBus™-Network control. Installation is easy with only a single ERX400 network/power cable, and the ultra-shallow mounting depth of 1.93" (49 mm) allows the remote to be mounted in a variety of areas on board.

## MS-NRX300



Take control of your audio entertainment with the MS-NRX300 black wired remote and enjoy localized audio control from any zone on board your boat. Featuring a 2.6" optically bonded dot matrix LCD, the remote is designed to perform and last on board. Installation is easy with only a single NMEA 2000® drop cable. When the MS-NRX300 is connected to an existing NMEA 2000 network with other marine electronics, the remote can also display data such as wind data, depth, speed, heading, position, ETA and water temperature.

## MS-ARX70



Enjoy the freedom to control your audio from anywhere around your boat with the MS-ARX70 wireless remote. Rated both IPX6 and IPX7 for water-resistance, it's perfect for the swim platform, bow, transom or anywhere you want quick audio adjustment. Fitted with high-bonding tape, installation is super easy — simply place and pair with your compatible Fusion stereo without the need to cut holes, run wires or add screws.

## MS-CRGBWRC/MS-RGBRC SPEAKER LIGHTING REMOTES



Enjoy full control of the illumination options of your Fusion LED speakers or subwoofer with a wireless lighting remote. The CRGBW wireless remote controls up to five pairs of CRGBW speakers or five CRGBW subwoofers. The RGB wireless remote that can control up to four pairs of RGB speakers or four RGB subwoofers. Both remotes have an effective range of 30' (10 meters), and they have a color select wheel and quick adjustment of brightness, mode (static or dynamic) and speed with a touch of a button.

# FUSION® SPEAKERS AND SUBWOOFERS

## APOLLO™ COAXIAL SPEAKERS



Surrender to the sound with Fusion Apollo™ coaxial marine speakers, and enjoy immersive, high-fidelity audio on the water. Complete the look, and customize your speakers with the included interchangeable grilles (sports white or sports gray is included; others are sold separately). Showcase your boat with the dual-hue LED lighting rings that provide a unique look.

**Available in:** 6.5" | 7.7" | 8.8"

## APOLLO™ SUBWOOFERS



Don't just hear the music. Feel it. Surrender to the sound with Fusion Apollo™ marine subwoofers, and complement your music with immersive and high-fidelity bass on the water. Complete the look, and customize your subwoofers with the included interchangeable grilles (sports white or sports gray is included; others are sold separately). Showcase your boat with the dual-hue LED lighting rings that provide a unique look.

**Available in:** 10" | 12"

## XS SERIES SPEAKERS



Enjoy high-performance acoustics and multicolor RGB LED lighting (requires Fusion MS-RGBRC wireless remote for full illumination control) with the XS Series speakers. The injection-molded polypropylene cone provides clean, clear audio reproduction while the aluminum dome tweeter delivers a smooth upper frequency response. The grilles are easily interchangeable with 2 colors included in the box (others sold separately), allowing you to match the style to your boat.

**Available in:** 4" | 6.5" | 7.7"

## XS SERIES SUBWOOFERS



Enjoy high-performance, low-end frequencies and multicolor RGB LED lighting with the XS Series subwoofers. The injection-molded polypropylene cone produces defined low frequencies while the large voice coil delivers increased power. The grilles are easily interchangeable with 2 colors included in the box (others sold separately), allowing you to match the style to your boat.

**Available in:** 10"

# FUSION® SPEAKERS AND SUBWOOFERS

# FUSION® SPEAKERS AND SUBWOOFERS

## SIGNATURE SERIES 3i WAKE TOWER SPEAKERS



Bring on the action. Enjoy crystal-clear audio on the wake with the Signature Series 3i wake tower speakers. These speakers combine CURV Cone Technology with a precisely calculated enclosure and are acoustically optimized to produce premium sound that cuts through the air on every run. Multiple mounting accessories are available (sold separately), making onboard installation quick and easy, while CRGBW LED lighting matches your mood.

**Available in:** 6.5" | 8.8"

## XS SERIES WAKE TOWER SPEAKERS



The XS Series wake tower speakers deliver high-performance acoustics and multicolor RGB LED lighting for your wake boat. These speakers combine an injection-molded polypropylene cone with a precisely calculated enclosure for optimized sound on the wake. Multiple mounting accessories are available (sold separately), making onboard installation quick and easy. The grilles are easily interchangeable (sold separately), allowing you to match the style to your boat.

**Available in:** 6.5"

## FM SERIES SPEAKERS



These flush-mount marine speakers are designed to deliver quality acoustics with a sleek and minimalistic aesthetic to meet modern boat design trends. Featuring a nonintrusive mounting system, they easily mount without the need to create screw holes in your boat. The injection-molded polypropylene cone provides clean, clear audio reproduction, while the aluminum dome tweeter delivers a smooth upper frequency response.

**Available in:** 6.5" | 7.7"

## FM SERIES SUBWOOFERS



These flush-mount marine subwoofers are designed to enhance your on-water listening experience with quality bass in a sleek and minimalistic aesthetic. Featuring a nonintrusive mounting system, they easily mount without the need to create any screw holes in your boat. The injection-molded polypropylene cone produces defined low frequencies while the large voice coil delivers increased power.

**Available in:** 10"

## SIGNATURE SERIES WAKE TOWER MOUNTING BRACKETS



These mounting brackets are designed for Signature Series 3i 8.8" wake tower speakers. Fixed-mount and swivel-mount brackets include inserts to fit wake tower bars of different diameters — from 1.31" (33.4 mm) to 2.5" (63.5 mm). A deck mount option is also available for mounting onto a flat surface. They feature a UV-stable and salt fog-resistant aluminum alloy design.

**Available in:** FIXED MOUNT | SWIVEL MOUNT | DECK MOUNT

## XS SERIES WAKE TOWER MOUNTING BRACKETS



These mounting brackets are designed for the XS Series 6.5" and Signature Series 3i 6.5" wake tower speakers. They're user-adjustable to fit wake tower bars of different diameters. The 2.5" pipe-mount bracket fits bars from 2" (50.8 mm) to 2.5" (63.5 mm) and the 2" bracket fits bars from 1.75" (44.5 mm) to 2" (50.8 mm). A flat mount bracket is also available for mounting onto a flat surface. They feature a UV-stable and salt fog-resistant aluminum alloy design.

**Available in:** 2.5" PIPE MOUNT | 2" PIPE MOUNT | FLAT MOUNT

## SM SERIES SPEAKERS



These shallow-mount speakers are designed for interior installations where mounting depth may be limited, with a depth requirement of only 0.94" (24 mm). A tuned, sealed enclosure with an optimized 3" speaker driver provides quality audio and protects the inner components, allowing these speakers to be installed without the need for rear speaker cups.

**Available in:** 6.5"

## EL SERIES SPEAKERS



Enjoy quality audio and multicolor RGB LED lighting (select sports style models, requires Fusion MS-RGBRC wireless remote for full illumination control) in a shallow-mount design. These speakers have a mounting depth requirement of 1.69" (43 mm), providing versatile installation on board. The injection-molded polypropylene cone provides clear audio reproduction while the lightweight voice coil delivers increased efficiency. The grilles are easily interchangeable (sold separately) allowing you to match the style to your boat.

**Available in:** 6.5"

# FUSION® AMPLIFIERS AND ACCESSORIES

# FUSION® STEREO AND SPEAKER KITS

## APOLLO™ AMPLIFIERS



Amplify the moment. The Fusion Apollo amplifiers are the difference between hearing the music and feeling it. Designed for use with compatible Fusion DSP-enabled stereos<sup>1</sup>, these amplifiers feature easy tune setup (requires Fusion Audio mobile app on your compatible device) for automatic regulation of audio settings, so you can enjoy the best quality sound without needing to make manual adjustments. With minimal distortion and noise, multichannel models are capable of producing an impressive 150-watt RMS per channel and the monoblock model produces 650-watt RMS to drive a subwoofer. A compact zone amplifier is also available for audio zone expansion, allowing you to add speakers to more areas of your boat. Mounting brackets and accessory connectors are included, simplifying installation and wiring.

**Available in:** MONOBLOCK | 4 CHANNEL | 6 CHANNEL | 8 CHANNEL | ZONE AMPLIFIER

## SIGNATURE SERIES AMPLIFIERS



Experience the power of music. The Signature Series amplifiers are designed to take your listening experience to a new level. With impressive protection from the marine environment, they deliver efficient, powerful performance on the water. Built to last on board, they feature conformal coated circuitry and an aluminum alloy heat sink for enhanced heat dissipation.

**Available in:** MONOBLOCK | 4 CHANNEL | 5 CHANNEL | 6 CHANNEL | 24-VOLT 6 CHANNEL | 8 CHANNEL

## AM SERIES AMPLIFIERS



These marine amplifiers are designed to enhance your on-water listening experience with quality audio amplification and efficient output to drive your onboard speakers and subwoofers. They feature conformal coated circuitry and a heat sink for enhanced heat dissipation to perform and last on board.

**Available in:** 2 CHANNEL | 4 CHANNEL

## FUSION HANDHELD MICROPHONE



Make announcements over your onboard audio entertainment system with this handheld microphone designed for compatible Fusion stereos with telemute capability. Featuring built-in pre-amplification and a compact design, this microphone is an easy addition to your helm. The playback override feature allows you to make quick announcements even when listening to music. Simply squeeze the trigger, and your music will be paused for onboard broadcasting.

## SIGNATURE SERIES 3i TWEETERS



Enhance your listening experience while on the move. These compact tweeters are designed to be mounted in raised positions to restore high frequencies so you can clearly hear vocals over engine, wind and wave noise. Water-resistant connectors provide simplified installation and superior protection against the elements.

## MS-RA210 AND XS SPEAKER KIT



Easily upgrade your existing audio entertainment system with a MS-RA210 stereo, a pair of XS Series non-illuminated speakers, NMEA 2000® drop cable, speaker cables, AM/FM antenna and mounting accessories. You'll have everything you need to quickly get out on the water and enjoy high-performance audio. Add additional speakers, subwoofers and amplifiers (each sold separately) for a superior on-water audio entertainment experience.

**Available in:** CLASSIC WHITE | SPORTS GRAY

## MS-RA60 AND EL SPEAKER KIT



Easily upgrade your existing audio entertainment system with a MS-RA60 stereo, a pair of EL Series non-illuminated speakers, speaker cables, AM/FM antenna and mounting accessories. You'll have everything you need to quickly get out on the water and enjoy quality audio at an outstanding value. Add additional speakers, subwoofers and amplifiers (each sold separately) for an enhanced on-water audio entertainment experience.

**Available in:** CLASSIC WHITE | SPORTS GRAY



<sup>1</sup>Compatible Fusion stereos include Apollo™ MS-RA770, Apollo™ MS-RA670, Apollo™ MS-WB675 and MS-RA210 (visit [Garmin.com](http://Garmin.com) for list of latest compatible products)



## GREAT SOUND FOR GREAT TIMES ON THE WATER

No matter what type of boat your voyage involves, there's nothing like a great audio system to set the tone for your fun times on board.

For nearly half a century, the name JL Audio has been synonymous with premium-engineered audio products that set the industry standard for performance, quality, value and reliability in challenging marine environments.

From loudspeakers, amplifiers and source units to subwoofers and accessories, the JL Audio lineup offers all the high-end components you need to create the ultimate on-water listening experience.

Crafted of the highest-quality materials, all JL Audio marine products are subjected to rigorous testing against harsh marine conditions, using high-tech simulations of real-life challenges, including water, moisture, UV exposure, salt and fog. As a result, these robust products easily exceed industry norms for environmental longevity to ensure years of consistent performance on your boat.

Fact is, if you're not hearing your favorite music through a JL Audio system, you're surely missing out on the clearest, richest, most dynamic sound reproduction ever to carry over the water.

## PROTECTION FOR MARINE ENVIRONMENTS

Known for their durability and moisture resistance in harsh environments, all JL Audio marine products are built to deliver years of listening enjoyment and resistance to the elements. They're subjected to rigorous environmental testing and easily exceed international standards for salt/fog and UV exposure.

## LET'S NETWORK

MediaMaster® marine source units from JL Audio are compatible with OneHelm™ data interfaces, allowing you to control your onboard audio systems – as well as other boat systems – from the screen of your networked Garmin MFD.

## MARINE AMPLIFIERS WITH INTEGRATED DSP

Digital Signal Processing (DSP) technology permits each channel's timing, frequency response and output levels to be optimized for exceptional sound quality.

## TüN® 4 SOFTWARE

Free TüN software is available for personal computers and compatible handheld devices. Its intuitive interface makes it easy to set up and adjust each amplifier channel's timing, frequency response and output levels for exceptional sound quality. Complex settings can be saved as presets for quick recall via a digital remote controller accessory.



# PATENTED AMPLIFIER TECHNOLOGY

# LIGHTING EFFECTS



## NEXD™ SWITCHING TECHNOLOGY

Small size, minimal heat, lots of power – Class-D amplifier design offers significant advantages. And our NexD switching technology adds even more, using enhanced pulse width modulation techniques to boost the amplifier's bandwidth while minimizing distortion and improving efficiency.

**Available in:** XDM and MX series amplifiers

## NEXD2™ SWITCHING TECHNOLOGY

A next-level approach to improving what is already an outstanding Class-D design platform. NexD2 amplifier technology from JL Audio employs new components and more advanced circuit layouts to achieve significant enhancements in audio fidelity and power efficiency.

**Available in:** MVi series amplifiers

## REGULATED, INTELLIGENT POWER SUPPLY (R.I.P.S.™)

A central feature of the premium marine amplifiers from JL Audio, R.I.P.S. technology seamlessly adjusts and monitors operation to ensure consistent power delivery over a wide range of battery voltages and load impedances. With R.I.P.S., optimum power is achievable at any impedance between 1.5 ohm and 4 ohm per channel, and at any vehicle voltage between 11 volts and 14.5 volts.

**Available in:** MHD series amplifiers

## ADVANCED ROLLBACK PROTECTION

Should a JL Audio amplifier equipped with advanced rollback protection reach an unsafe operating temperature, a special circuit rolls back peak power output, without changing gain, until the amplifier cools down to a safe operating temperature. Once the amplifier cools down, the circuit restores full peak power output, and the indicator reverts to its normal state. The operation is inaudible in most cases, but it ensures that your music keeps on playing, even under the most demanding conditions.

**Available in:** MVi, MHD and XDM series amplifiers

## SINGLE CYCLE CONTROL™

With this innovative JL Audio approach to Class-D amplifier control, audio correction is applied more than 400,000 times per second to eliminate distortion-causing signal anomalies and deliver unprecedented audio quality with reduced current draw and heat.

**Available in:** MHD series amplifiers

## TRANSFLECTIVE™ LED LIGHTING



This patented lighting technology, optional on most M6 and M7 series marine speakers, emits light through a specially engineered cone material to deliver a beautiful illumination effect with no hotspots or reflections on the cone surface. Select from a palette of fixed lighting colors – or add an optional RGB controller (sold separately) to create thousands of color variations. For even more versatility, add the optional Garmin Spectra™ marine lighting system and enjoy control of the LED lights on your boat from your compatible Garmin chartplotter or the ActiveCaptain® app on your compatible smartphone.



# JL AUDIO® SOURCE UNITS

# REMOTE CONTROLLER OPTIONS

## TAKE CHARGE OF YOUR AUDIO EXPERIENCE

Quality audio begins with a clean signal from a well-engineered source unit. Our MediaMaster® marine source units offer a wide variety of tuner and connectivity options for maximum listening flexibility and convenience on the water. Each model prioritizes audio performance with audiophile-quality, line-level outputs – ideal for use with JL Audio marine amplifiers. The helm-mount MediaMaster source units feature a beautiful full-color LCD display designed to be visible in bright sunlight. Certified NMEA 2000® connectivity is included for direct integration with vessel networks, allowing control from a variety of marine multifunction displays (MFDs). Enjoying quality audio on the water has never been easier or sounded better.

### MM105



Equipped with a variety of tuner and connectivity options, plus multizone level controls, the MediaMaster MM105 model features weather-resistant construction (minimum IP66 rated) with large controls and full-color LCD displays incorporating selectable lighting themes – Day or Night. The unit includes an AM/FM tuner<sup>1</sup>, BLUETOOTH® connectivity, USB connections with charging for USB drives or iPhone® devices plus 2 auxiliary RCA inputs – all designed to ensure nonstop enjoyment of the soundtracks to all your adventures.

### MM105-HR



Operating behind the scenes as a hidden receiver, the MediaMaster MM105-HR includes all the features of the MM105, minus the LCD display. It can be controlled directly from your compatible MFD<sup>2</sup> or with the optional MMR-40 NMEA 2000 network controller, which has a full-color LCD display.

### MM55



While the MediaMaster MM105 offers only line-level preamp outputs, the MM55 source unit is equipped with both line-level outputs and a robust 4-channel, 100-watt onboard amplifier (25-watt RMS x 4 channels) to directly power your loudspeakers. In addition to NMEA 2000 network connectivity, the MM55 offers a variety of source and media options that include global radio tuners, a USB input, analog AUX input and streaming audio capabilities, courtesy of BLUETOOTH® wireless technology.

### MM55-HR



Including all the features of the MediaMaster MM55, minus the LCD display, the MM55-HR is a hideaway source unit that can be controlled directly from your compatible MFD<sup>2</sup> or with the optional MMR-40 NMEA 2000 network controller, which has a full-color LCD display.

### MMA-1-HTML



This NMEA 2000-certified data interface for the MediaMaster MM105, MM105-HR, MM55 and MM55-HR source units is designed to interface MediaMaster-themed navigation and controls directly into your vessel's compatible MFD. This lets you pilot your boat and control your audio system seamlessly via your helm's MFD.

## MMR-40 WIRED NETWORK CONTROLLER



Full-function NMEA 2000® network controller with full-color LCD display, for use with MediaMaster source units.

## MMR-20-BE ROUND WIRED REMOTE



Non-display remote controller for use with MediaMaster source units.

## MMR-25W BLUETOOTH® REMOTE CONTROLLER



Wireless remote controller for use with MediaMaster source units.

## MMR-5N2K NETWORK VOLUME CONTROLLER



NMEA 2000 network compatible audio volume controller for MediaMaster.

## MEDIAMASTER REMOTE APP



Easily navigate and command your boat's MediaMaster audio system from up to 35' away (11 meters) via wireless BLUETOOTH technology, using your compatible smartphone or tablet device.

## BLUETOOTH RECEIVERS AND CONTROLLERS

### MBT-CRXv3 AUDIO CONTROLLER AND RECEIVER



Using BLUETOOTH technology, this compact, water-resistant (IP67 rated) controller/receiver can receive audio wirelessly from your compatible streaming device up to 35' (11 meters) away. Independent audio zone level controls with LED color indicators ensure effortless command of your sound system while your streaming device is stowed safely away.

### MBT-RXv2 WIRELESS AUDIO RECEIVER



Using BLUETOOTH technology, this compact, water-resistant (IP67 rated) controller/receiver can receive audio wirelessly from your compatible streaming device up to 35' (11 meters) away. Independent audio zone level controls with LED color indicators ensure effortless command of your sound system while your streaming device is stowed safely away.

<sup>1</sup>Digital HD radio (North America) and DAB+ radio (Europe) services subject to local availability • <sup>2</sup>Refer to MFD manufacturer for compatibility information • NMEA®, NMEA 2000®, and the NMEA 2000 logo are registered trademarks of the National Marine Electronics Association. • The Bluetooth word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. and any use of such marks by Garmin is under license. • iPhone is a trademark of Apple Inc., registered in the U.S. and other countries.

NMEA®, NMEA 2000®, and the NMEA 2000 logo are registered trademarks of the National Marine Electronics Association.

# JL AUDIO® SPEAKERS AND SUBWOOFERS

# JL AUDIO® SPEAKERS AND SUBWOOFERS

## DISCOVER A SUPERIOR MARINE AUDIO EXPERIENCE

On seagoing and freshwater boats of all types, the JL Audio brand stands for unmatched quality, fidelity and power-handling performance in marine loudspeaker systems. Built with premium-grade materials, these speakers and subwoofers are rigorously tested using advanced salt-fog and UV test equipment, simulating years of exposure to the elements. As a result, these products far exceed typical industry standards for environmental longevity testing and performance in open-air marine audio installations.

## M6 SPEAKERS AND SUBWOOFERS

### M6 COAXIAL SPEAKERS



Engineered for stand-alone use or in conjunction with our marine subwoofers, M6 series marine speakers are built to deliver unmatched audio fidelity on the water. Equipped with a front-mounted tweeter, suspended above a woofer, all M6 coaxial systems are optimized to yield superior frequency response and smooth midrange dispersion. Long-excursion, DMA-optimized woofers and matching silk dome tweeters for each coaxial size produce superior output capability with impressive bass response and sparkling high frequency detail. For added visual interest, patented Transflective™ LED lighting is available as an option.

**Available in:** 6.5" | 7.7" | 8.8"  
**Grille option:** Sport White, Sport Gray, Classic White

### M6 COMPONENT TWEETERS



Premium M6 series 1" component tweeters are built to deliver high output, wide dispersion and sparkling high-frequency detail to your onboard audio system. The light, fast-moving silk dome tweeter diaphragm provides excellent off-axis response and damping for balanced coverage in your listening environment. Plus, an automatic, solid-state circuit is on board to monitor current and minimize the possibility of tweeter failure. Flush and surface-mount fixtures are included, and three mounting cup, tweeter mesh and trim ring combinations are offered. Like all M6 models, these component tweeters are built to withstand real-world saltwater conditions with an unsurpassed level of fidelity.

**Available in:** 1.0"  
**Grille option:** Sport White, Sport Gray, Sport Titanium

### M6 ENCLOSED SPEAKERS



Equipped with our maximum-performance M6 speakers, the enclosed M6-ETXv3 and M6-VEX™ systems are designed to deliver pure audio delight — with strong projected output from your wake tower or other open-air installation. Available in 2 sizes, M6-ETXv3 models feature sleek marine-grade polymer enclosures for outstanding durability and clarity on larger vessels. For smaller boats or personal watercraft, the compact 6.5" M6-VEX pods are housed in tough, injection-molded enclosures and are optimized for use with a high-quality subwoofer system. Optional built-in RGB LED accent lighting is available on both the M6-ETXv3 and M6-VEX systems.

**M6-ETXv3 models available in:** 7.7" | 8.8"  
**M6-VEX models available in:** 6.5"  
**Grille option:** Sport White, Sport Gray, Classic White

### M6 SUBWOOFERS



Available in 8" and 10" sizes, the M6 series subwoofers are an essential part of the JL Audio formula for great marine audio. A properly set up subwoofer system frees your smaller main speakers from the burden of reproducing the lowest frequencies in your music, allowing your whole system to play louder and sound cleaner at all listening levels. For visual interest, patented Transflective LED lighting is available on all models, producing smooth cone illumination with no hotspots or reflections on the cone surface.

**Available in infinite baffle (IB) or enclosed use (W):** 8" | 10"  
**Grille option:** Sport White, Sport Gray, Classic White

## M7 SUBWOOFERS



Known as the "King of Bass," these massive JL Audio 12" subwoofers feature oversized, overbuilt components and powerful motor systems to produce staggering amounts of jaw-dropping bass in your marine audio system. A 4" voice coil and rugged suspension system deliver outstanding linear excursion for high output and power handling. Patented Transflective™ LED lighting is optional on all M7 models, emitting a smooth lighting effect through the woofer cone, with a choice of several lighting colors. Add an optional RGB controller to create thousands of color variations. Professional installation is recommended.

**Available in:** 12" infinite baffle  
**Grille option:** Sport White, Sport Gray, Classic White

## LUXE GRILLE SPEAKERS AND SUBWOOFERS

### M6 LUXE SPEAKERS



Featuring low-profile, fine mesh grilles with marine-grade finishes, these Luxe Grille M6 coaxial speakers combine discreet design with top-flight audio performance for luxury marine installations. A long-excursion, DMA-optimized woofer and matching silk dome tweeter deliver superior output capability with impressive bass response and sparkling high-frequency detail. Exceeding expectations for performance in harsh marine environments, these premium M6 speaker systems are found in some of the finest, most elegant boats in the world.

**Available in:** 6.5" | 7.7" | 8.8"  
**Grille option:** White, Black

### M6 LUXE SUBWOOFERS



Able to generate smooth, powerful bass while blending in with the finest vessel designs, these Luxe Grille M6 subwoofers are built with rugged suspension systems and long excursion capabilities to bring out the best in your JL Audio marine sound system. The Luxe subwoofers are outfitted with a low-profile mounting bezel and a fine mesh grille for minimal protrusion into cabin space. Like all M6 loudspeakers, this Luxe version is built to withstand a real saltwater marine environment for years of high-end listening enjoyment.

**Available in infinite baffle (IB):** 8" | 10"  
**Grille option:** White, Black

# JL AUDIO® SPEAKERS AND SUBWOOFERS

# STOWAWAY AND SPEAKER ACCESSORIES

## M3 SPEAKERS

### M3 COAXIAL SPEAKERS



Born from the same DNA as the flagship JL Audio M6 drivers, our M3 marine speakers are engineered for those who value outstanding sound quality at a lower price point. Built alongside their M6 counterparts, the M3 series uses the same marine-grade materials to ensure outstanding longevity in open-air environments. Designed to benefit from operation with quality amplification, M3 marine speakers are also suitable for use with standard marine head-unit power. Built-in RGB LED lighting is also available on all sport grille M3 models to add visual highlights to your boat.

**Available in:** 6.5" | 7.7"

**Grille option:** Sport White, Sport Gray, Classic White

### M3 ENCLOSED SPEAKERS



Sealed enclosures for these M3 series speakers are tuned to provide optimal sound while keeping the elements out. They're ideal for delivering clean, loud audio from your wake tower or other open-air installation. For larger vessels, the M3-ETXv3 systems' sleek polymer enclosures house an oversized 7.7" coaxial driver for fuller sound with strong mid-bass output. For smaller boats or personal watercraft, the ultra-compact 6.5" M6-VEX™ pod speakers are housed in tough, injection-molded enclosures and are optimized for use with a high-quality subwoofer system. Optional built-in RGB LED accent lighting is available on both the M3-ETXv3 and M3-VEX™ systems.

**M3-ETXv3 available in:** 7.7"

**M3-VEX available in:** 6.5"

**Grille option:** Sport White, Sport Gray, Classic White

### M3 SUBWOOFERS



Delivering outstanding sub-bass performance in moderate power applications, the M3 series of infinite-baffle subwoofers provides a strong but affordable foundation for your boat's audio system. Designed with the same DNA as our flagship M6 series speakers, the M3 subwoofers deliver rich bass that will impress you, not only with its sheer level, but also with its smoothness, balance and precision. For visual interest, optional built-in RGB LED accent lighting is available on M3 sport grille models.

**Available in:** 10" infinite baffle

**Grille option:** Sport White, Sport Gray, Classic White

## STOWAWAY™

### STOWAWAY ENCLOSED SUBWOOFER SYSTEMS



Purpose-built for adding outstanding bass performance in unconventional applications, these rugged StowAway™ subwoofer systems take full advantage of the extremely small box requirements of the TW1 driver to generate smooth, powerful and articulate bass from surprisingly compact enclosures. All models feature a down-firing hard-shell enclosure that can be mounted almost anywhere.

**Available in:** 10" | 12"; 2 ohms or 4 ohms

## SPEAKER ACCESSORIES

### MLC-RW MARINE LIGHTING CONTROLLER



This compact LED lighting controller works with your LED speakers to give you total control over the light show on your boat. It fits almost anywhere and lets you choose from fixed lighting colors or custom control of the color and intensity of your lighting. It produces up to 30 amps (400 watts) of continuous output to power your light system, and you can use it with the rotary encoder or control lighting remotely by using the built-in Wi-Fi® connection and the LiteWave app on your compatible smartphone.

### LIGHT CAPS FOR ETXv3



Purpose-built for ETXv3 enclosures, each of these machined aluminum caps features a built-in, down-firing LED light strip to illuminate the area below it. For retrofitting, each light cap can mount over an enclosure's existing rear logo cap.

### ETXv3 MOUNTING HARDWARE



Featuring a tough, clear anodized finish that's UV/corrosion resistant, mounting fixtures for ETXv3 enclosures are available to fit a variety of OEM boat towers. Each fixture is precision-machined from marine-grade aluminum to create rock-solid attachment points.

### NEOPRENE COVERS FOR ETXv3



Constructed from 3-mm neoprene, these durable protective cases are designed to provide stylish but serious protection for JL Audio ETXv3 enclosed speaker systems. They're designed to work with any mounting clamp/application, and a high-quality #5 zipper with locking slider on the front facilitates quick, easy covering or removal.

# JL AUDIO® AMPLIFIERS

## THE POWER BEHIND YOUR PREMIUM AUDIO EXPERIENCE

Benefitting from decades of JL Audio engineering experience, these cutting-edge amplifiers combine superb sonic quality with high-efficiency design that draws less current per watt of power output versus conventional marine systems. This allows these amps to be more compact, run cooler and reduce stress on your boat's electrical system. From the ultracompact MX series amplifiers to our state-of-the-art MVi models with integrated Digital Signal Processing (DSP), you are certain to find the right model to fit your system's needs — allowing you to enjoy clean, pure audio output and legendary durability for years of reliable marine service.

### MVi AMPLIFIERS WITH INTEGRATED DSP



Engineered for first-class audio fidelity, the MVi series marine amplifiers combine a full range of advanced DSP functions with cutting-edge NexD2™ amplifier technology. The result is a striking new level of audio performance and onboard tuning capabilities. Adjustable high-pass and low-pass filters allow you to customize audio output to match your speaker setup. And instead of traditional knobs and switches, free TüN™ software on your PC, tablet or smartphone is used to make all setup and audio adjustments. To protect against the elements, the MVi series utilizes a powder-coated cast alloy chassis with corrosion-resistant hardware and connectors.

**Available in:** Monoblock 600-watt or 1000-watt | 2-channel 600-watt | 4-channel 400-watt | 5-channel 700-watt or 1000-watt | 6-channel 600-watt | 8-channel 800-watt  
**Accessories:** MVi-HUB Network Hub, M-DRC-50 Digital Preset Controller, MVi-DRCADAPT Rotary DRC Adaptor

### XDM AMPLIFIERS



In the XDM series of marine amplifiers, advanced NexD™ switching technology achieves exceptional efficiency, reducing current draw and heat for reliable, high-power output within a compact, easy-to-install unit. With total amplifier efficiencies exceeding 80%, the XDM series' energy-saving advantages also make them much kinder to your boat's electrical system than conventional amplifiers of similar power. Beneath each amplifier's sealed security cover, you'll find studio-grade signal processing with fully variable crossover filters. Differential-balanced inputs support outstanding noise rejection and crystal-clear audio performance on your boat.

**Available in:** Monoblock 300-watt, 600-watt or 1000-watt | 2-channel 200-watt | 3-channel 500-watt | 4-channel 400-watt | 5-channel 700-watt or 1000-watt | 6-channel 600-watt | 8-channel 800-watt | 24-volt 6-channel 600-watt or 8-channel 800-watt  
**Accessories:** M-RBC-1 Remote Bass Control

### MHD AMPLIFIERS



Combining groundbreaking Single Cycle Control™ switching and regulated, intelligent power supply (R.I.P.S.™) technologies, these MHD stereo amplifiers deliver world-class, full-range fidelity and ultra-powerful output from a surprisingly small package. The amplifiers' advanced technology wastes very little power compared to conventional marine systems, resulting in less heat being generated for each watt of output. This allows more clean, raw power to be extracted from a very space-efficient chassis. Plus, the fact that all MHD amplifier models share the same compact footprint makes for easy stacking of units in tight-space installations.

**Available in:** Monoblock 750-watt | 4-channel 600-watt | 5-channel 950-watt | 24V 4-channel 600-watt or 5-channel 950-watt  
**Accessories:** MHD-RLC Remote Level Control, HD\_STACK\_KIT Amplifier Stacking Hardware

### MX AMPLIFIERS



Ultracompact and ultra-efficient, these MX series amplifiers pack a serious audio punch to bring your music to life. They employ an advanced NexD™ switching design with a full range of high-end signal processing capabilities to generate loads of clean power while minimizing distortion and improving efficiency overall. The space-saving, powder-coated cast aluminum chassis is corrosion resistant and boasts an IPX7 water-resistance rating, making it ideal for applications where humidity and moisture are part of the equation.

**Available in:** Monoblock 300-watt or 500-watt | 4-channel 280-watt or 500-watt | 3-channel 600-watt  
**Accessories:** M-RBC-1 Remote Bass Control

# JL AUDIO® MARINE CONNECTION SYSTEMS

## QUALITY ENGINEERED FOR TOUGH MARINE ENVIRONMENTS

### AUDIO INTERCONNECTS



Our marine audio interconnect cables feature brass connector bodies with marine-grade plating and an over-molded design that prevents corrosion. Twisted pair construction minimizes the likelihood of induced noise to keep your music clean.

### JACKS FOR PANEL MOUNTING



Weatherproof panel-mounting jacks allow you to create a permanent connection point for a wide variety of portable audio sources.

### AMPLIFIER POWER KITS



Enhance the safety of your audio system and vessel with secure power connection wiring and the included marine circuit breaker. As with all our premium kits, the power wire is true AWG-spec, pure OFC copper, which is tinned to combat corrosion.

### BATTERY CONNECTORS



The XB-BTU battery connector is ideal for systems requiring multiple power connections at the battery. The included adapter collar allows it to be used for negative or positive post connections. OmniSert™ technology ensures secure, high-integrity wire contact.

### DISTRIBUTION BLOCKS



Four-way or two-way MAXI™ fused power distribution blocks accept wire from 1/0 to 4 AWG, while the fused outlets each accept wire from 4 AWG to 8 AWG. OmniSert receptacles capture various size wires without the need for adapter sleeves. Fuses sold separately.

### MASTER CIRCUIT BREAKERS



Protect your marine audio system with these waterproof, ignition-protected XMD-MCB series circuit breakers. They eliminate the need to replace blown fuses and can withstand immersion in water up to 1 meter deep.

### POWER WIRE



Premium tinned OFC copper power wire is available in ABYC standard red or yellow jackets and produced to true 6 AWG or 2 AWG specifications. The flexible PVC jackets are oil- and gas-resistant with UV inhibitors.

### SPEAKER WIRE



Premium 12 AWG or 16 AWG marine speaker cable features parallel conductors, tinned for corrosion resistance. The soft, white PVC jacket makes the wire very flexible, and the all-copper wire construction makes sure your signals are transmitted with minimal resistance.

### MULTIFUNCTION WIRE



Marine-grade, 6-conductor, white multifunction cable conveniently includes speaker and power wire for LED speakers, all in one cable. It's ideal for use with JL Audio speakers and subwoofers featuring built-in RGB LED illumination.

# GARMIN SPECTRA™ LED CONTROL MODULES



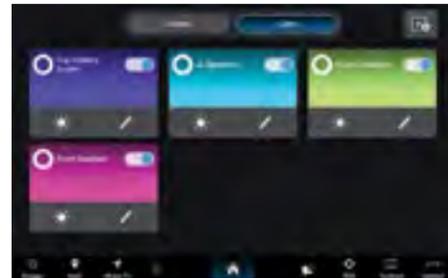
010-02829-00 | Garmin Spectra™ LC102



010-02830-00 | Garmin Spectra™ LC302

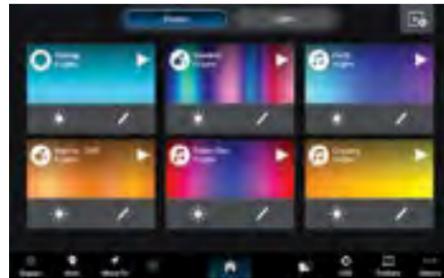
Set the vibe for your ride with the Garmin Spectra marine lighting system. These compact lighting controllers make it easy to control LED lights on your boat with your compatible Garmin chartplotter or the ActiveCaptain® app on your compatible smartphone. Fusion Apollo™ marine stereos can control select functions (including scene selection, choosing audio sync modes and effects) from the stereo UI. You can also control LED illumination on Fusion® and JL Audio® speakers and subwoofers. For premium onboard entertainment, match the lights to the beat with the audio sync feature. The controller is available with one or three outputs and provides boaters with the option of setting up separate lighting groups on their vessels. Optimize your time on the water with a seamless integrated lighting control system.

## IN YOUR CONTROL



Control lights over the NMEA 2000® network with your compatible chartplotter or with the ActiveCaptain app on your compatible smartphone.

## BE THE LIGHT DJ



From bow to stern and everything in between, this module lets you control and set up different light groups and scenes.

## MATCH THE BEAT



See the beat by syncing the LED lights to the music track with the audio sync feature.

## SPECIAL SPECTRA FEATURES

Compact integrated LED light controller can be installed in tight spaces

Two variants available: LC102 with one output and LC302 with three outputs

Control and set up different light groups and scenes

Scalable system allows captains to add more lights after the initial setup

Control lights over the NMEA network with your compatible chartplotter or with the ActiveCaptain app on your compatible smartphone

See the beat by syncing the LED lights to the music track with the audio sync feature

Simple setup and installation

Built to withstand the abuse of life on the water (in accordance with IP66/IP67 ratings)

Supports lighting systems that draw less than 2 amps



# CHARTPLOTTERS



## GPSMAP® 9000 MFD SERIES



010-02673-01 | 9219



010-02674-01 | 9222



010-02675-01 | 9224



010-02676 | 9227

Designed for captains who demand the best, the large-format GPSMAP 9000 series is the industry's first integrated 4K-resolution, in-plane switching (IPS) touchscreen chartplotter. Featuring edge-to-edge clarity, premium materials, wide viewing angles and processing power that is 7 times faster than previous generation glass helms, these multifunction displays are offered in sizes ranging from 19" to a big-as-they-come 27" format. High-speed network processing gives you a wide range of connectivity options, making it easy to link your compatible MFDs, cameras, sonars and more on the Garmin BlueNet™ network. Enjoy high-quality entertainment with multimedia streaming and seamless video integration. Plus, you can also use spoken commands to control your helm with your compatible headset. For navigation, the GPSMAP 9000 displays offer built-in Garmin Navionics+™ charts with Auto Guidance+ technology<sup>1</sup>. They're also compatible with premium Garmin Navionics Vision+™ charts.



4K RESOLUTION,  
IPS TOUCHSCREEN DISPLAY

HIGH-PERFORMANCE PROCESSOR

GIGABIT SPEEDS ON GARMIN  
BLUENET™ NETWORK

VIDEO INTEGRATION CAPABILITIES

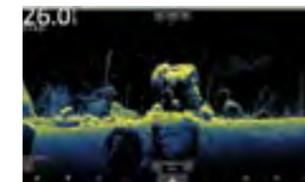


### GARMIN NAVIONICS+ CHARTS



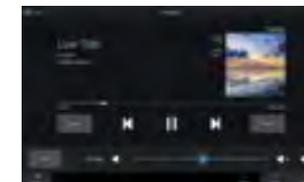
Highly detailed charts and maps featuring Navionics® data and Auto Guidance+ technology<sup>1</sup>.

### SONAR SUPPORT



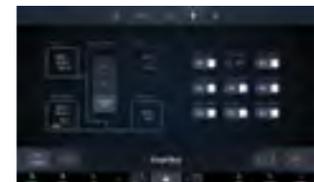
Supports full range of Garmin traditional, UHD scanning and Live Sonar systems.

### NMEA 2000® AND NMEA 0183 NETWORKS



Connect with autopilots, engine data, the Fusion® Audio system and other compatible marine sensors and ecosystems.

### DIGITAL SWITCHING



Nearly all your boat system controls are available right at your fingertips.

## ADDITIONAL SERIES FEATURES

Premium, large-format 4K IPS touchscreen displays offer wide viewing angles, superior clarity and sunlight readability even with polarized sunglasses

Processing power is 7 times faster than previous generations for superior performance on your luxury screen

Build extensive networks with reliable connectivity and gigabit speeds on the proprietary Garmin BlueNet™ network

Enjoy high-quality entertainment with video integration capabilities with HDCP distribution

See fish like never before. Hook up to any of our scanning, traditional or Live Sonar modules to view targets on the 4k display (transducers and blackboxes sold separately)

Navigate with preloaded Garmin Navionics+™ charts; get support for Garmin Navionics Vision+™ charts with premium features such as high-resolution relief shading

Get your precise location with multi-band GPS and heading accuracy even at slow speeds with the included GPS 24xd position receiver and antenna

OneHelm™ and EmpirBus™ bring full control of all your onboard boat systems, such as lighting, propulsion, pumps, air conditioning and infotainment to your MFD screen

Connect your compatible Garmin devices with integrated BLUETOOTH® and ANT® technologies; use spoken commands to control the chartplotter with your compatible headset

Built-in Wi-Fi® pairs with free ActiveCaptain™ app for access to OneChart™ downloads, smart notifications<sup>2</sup>, software updates, Garmin Quickdraw™ Community data and more

<sup>1</sup>Auto Guidance+ is for planning purposes only and does not replace safe navigation operations • <sup>2</sup>When paired with a compatible smartphone; see [Garmin.com/ble](http://Garmin.com/ble) • Wi-Fi is a registered trademark of the Wi-Fi Alliance • The Bluetooth word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. and any use of such marks by Garmin is under license.

# GPSMAP® 8600 CHARTPLOTTER SERIES



10-02091-50 | 8610  
10-02091-51 | 8610xsv



010-02092-50 | 8612  
010-02092-51 | 8612xsv



010-02093-50 | 8616  
010-02093-51 | 8616xsv

Chartplotter and chartplotter/sonar combos feature full HD in-plane switching (IPS) touchscreen displays for wider viewing angles, superior clarity and sunlight readability even with polarized sunglasses. GPSMAP 8600 series units come with built-in Garmin Navionics+™ charts featuring Auto Guidance+™ technology<sup>1</sup>. They're also compatible with premium Garmin Navionics Vision+™ charts.



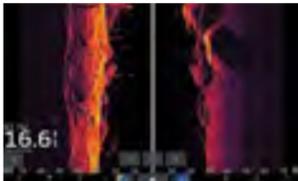
» HIGH-RESOLUTION, IPS TOUCHSCREEN DISPLAY

• HIGH-PERFORMANCE PROCESSOR

• FULLY NETWORKABLE

• XSV MODELS INCLUDE BUILT-IN SUPPORT FOR THE FULL SUITE OF GARMIN SONAR OPTIONS

## ULTRA HIGH-DEFINITION SONAR



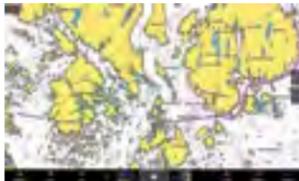
Built-in support for the Ultra High-Definition scanning sonar system; no black box needed.

## LIVESCOPE™



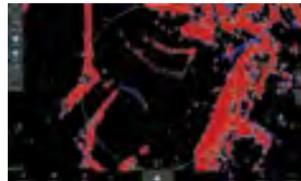
Supports all LiveScope sonar, including the LiveScope Plus System and LiveScope XR System.

## GARMIN NAVIONICS+ CHARTS



Highly detailed charts and maps featuring Navionics+™ data and Auto Guidance+™ technology<sup>1</sup>.

## GMR FANTOM™ RADAR



Supports Fantom radar with MotionScope™ technology.

## ADDITIONAL SERIES FEATURES

Full HD IPS touchscreen display for wider viewing angles, superior clarity and sunlight readability even with polarized sunglasses

Built-in support for the full suite of Garmin sonar capabilities: CHIRP traditional, ClearVü and SideVü scanning sonars, Ultra-High Definition scanning sonar (no black box needed), the LiveScope systems and the full line of Panoptix™ sonars (transducers sold separately)

Adds a stunning appearance with ability to install multiple displays either flat mounted edge to edge to create a sleek glass helm look or mounted flush

Fully NMEA 2000® and Garmin Marine Network capable to easily build your marine system, from sonar, radar and autopilots to instruments, cameras and multimedia

BLUETOOTH®, ANT®, Wi-Fi® connectivity for quatix® smartwatches, VIRB® 360, gWind™ Wireless 2 and more

Use exclusive OneHelm™ feature to connect to many third-party devices for full control of your boat on your chartplotter screen

Preloaded with Garmin Navionics+ charts featuring Auto Guidance+™ routing technology<sup>1</sup>

SmartMode™ station controls enable presets for one-touch access to docking, cruising, fishing, anchoring and more

Built-in SailAssist provides data, displays and prerace guidance needed to gain a competitive edge

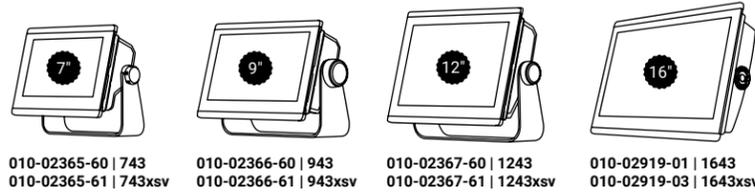
Use built-in Wifi networking to pair with your compatible smartphone using the free ActiveCaptain app for access to OneChart, smart notifications, Garmin Quickdraw community data and more.

Compatible with Force™ trolling motors for full control of the motor from the chartplotter screen, plus the ability to route to waypoints, follow tracks and more



<sup>1</sup>Auto Guidance+ is for planning purposes only and does not replace safe navigation operations • Wi-Fi is a registered trademark of the Wi-Fi Alliance. • The Bluetooth word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. and any use of such marks by Garmin is under license.

# GPSMAP® X3 SERIES



Embrace connectivity, clarity and control at the helm with the GPSMAP X3 series chartplotters. These fast, responsive touchscreen units offer seamless network integration and support for traditional and scanning sonar capabilities<sup>1</sup>, J1939 engine connectivity, OneHelm™ digital switching and more. GPSMAP X3 series units come with built-in Garmin Navionics+™ charts featuring Auto Guidance+<sup>2</sup> technology. They're also compatible with premium Garmin Navionics Vision+™ mapping.

J1939 ENGINE CONNECTIVITY

ONEHELM DIGITAL SWITCHING CAPABILITIES

AVAILABLE WITH BUILT-IN GARMIN NAVIONICS+ CHARTS FEATURING AUTO GUIDANCE+ TECHNOLOGY<sup>2</sup>

XSV MODELS INCLUDE BUILT-IN SUPPORT FOR THE FULL SUITE OF GARMIN SONAR OPTIONS<sup>1</sup>

## ULTRA HIGH-DEFINITION SONAR



Offers built-in support for the Ultra High-Definition scanning sonar system; no black box needed.

## LIVESCOPE™



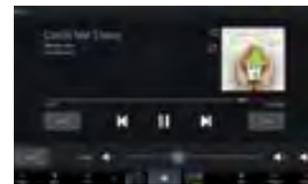
Supports all LiveScope Sonar Systems.

## GARMIN NAVIONICS+ CHARTS



Highly detailed charts and maps featuring Navionics® data and Auto Guidance+<sup>2</sup> technology.

## NMEA 2000® AND NMEA 0183 NETWORKS



Connect with autopilots, the Fusion Audio system and engine data.

## ADDITIONAL SERIES FEATURES

Bright, easy-to-use, sunlight-readable displays have more pixels than previous-generation GPSMAP touchscreens for ultra-sharp visibility from any angle

Slimline display borders, edge-to-edge glass and reduced unit footprint make for an easy fit in a wider range of dash configurations

Easily build your marine system — from compatible sonar and autopilots to compatible radar, cameras and multimedia — using NMEA 2000® and NMEA 0183 network connectivity and the Garmin Marine Network

Use the exclusive OneHelm™ feature to connect to many third-party devices for full control of your boat on your chartplotter screen

Use built-in Wifi networking to pair with your compatible smartphone using the free ActiveCaptain app<sup>3</sup> for access to OneChart, smart notifications, Garmin Quickdraw community data and more.

Integrated ANT® technology support for use with your compatible quatrix® marine smartwatches, gWind™ Wireless 2 transducer, GNX™ Wind marine instrument and wireless remote controls

Built-in Garmin SailAssist™ features, including laylines, race features, set and drift, wind data and more

Compatible with Force™ trolling motors for full control of the motor from the chartplotter screen, plus the ability to route to waypoints, follow tracks and more

<sup>1</sup>Available with or without included transducer • <sup>2</sup>Auto Guidance+ is for planning purposes only and does not replace safe navigation operations • <sup>3</sup>Additional equipment (sold separately) and device pairing required

# GPSMAP® 1042/1242 SERIES



010-01740-50 | 1042xsv  
010-01740-60 | 1042xsv + transducer

010-01741-50 | 1242xsv  
010-01741-60 | 1242xsv + transducer

All-in-one networking chartplotter/sonar combos with keypad interfaces and multifunction control knob, traditional and scanning sonar capabilities<sup>1</sup>. They're available with built-in Garmin Navionics+™ charts featuring Auto Guidance+<sup>2</sup> technology. They're also compatible with premium Garmin Navionics Vision+™ charts.

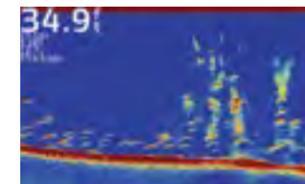
KEYED INTERFACE WITH MULTIFUNCTION CONTROL KNOB

FULLY NETWORKABLE

BUILT-IN CHIRP TRADITIONAL, CLEARVÜ™ AND SIDEVÜ™ SCANNING SONAR<sup>1</sup>

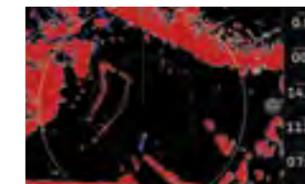
AVAILABLE WITH BUILT-IN GARMIN NAVIONICS+ CHARTS FEATURING AUTO GUIDANCE+ TECHNOLOGY<sup>2</sup>

## BUILT-IN SONAR<sup>1</sup>



All feature incredibly real CHIRP Traditional sonar.

## FANTOM™ RADAR



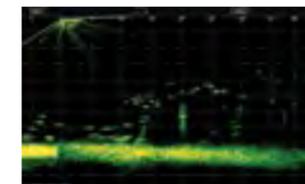
Supports Fantom radar with MotionScope™ technology.

## GARMIN NAVIONICS+ CHARTS



Highly detailed marine charts featuring Navionics® data and Auto Guidance+ technology<sup>2</sup>.

## LIVESCOPE™



Supports all LiveScope Sonar systems

## ADDITIONAL SERIES FEATURES

Built-in Garmin single-channel 1 kW CHIRP traditional sonar, 1 kW CHIRP ClearVü and CHIRP SideVü scanning sonar<sup>1</sup>

Supports all compatible Garmin sonar options plus black box sonar systems; view multiple sources simultaneously

Full digital switching system allows you to power up your boat while away from the dock, switch on pumps and control lights — even underwater lights

Network-compatible connectivity includes Wi-Fi®, ANT® technology, Ethernet ports, NMEA 2000®, HDMI and USB ports, Fusion Audio integration

Built-in Garmin SailAssist™ feature provides data, displays and prerace guidance needed to gain a competitive edge

ActiveCaptain® application support

Compatible with Force® trolling motors for full control of the motor from the chartplotter screen, plus the ability to route to waypoints, follow tracks and more

<sup>1</sup>Available only in XSV models with transducer included • <sup>2</sup>Auto Guidance+ is for planning purposes only and does not replace safe navigation operations • Wi-Fi is a registered trademark of the Wi-Fi Alliance • NMEA®, NMEA 2000®, and the NMEA 2000 logo are registered trademarks of the National Marine Electronics Association.



# ECHOMAP® ULTRA 2 SERIES



010-02880-00 | 106sv  
 010-02880-01 | 106sv + transducer  
 010-02879-00 | 102sv  
 010-02879-01 | 102sv + transducer



010-02882-00 | 126sv  
 010-02882-01 | 126sv + transducer  
 010-02881-00 | 122sv  
 010-02881-01 | 122sv with transducer

All the fishing tools are built-in. ECHOMAP Ultra 2 models feature a 10" or 12" touchscreen with keyed-assist IPS display. There's also support for the full line of LiveScope™ sonars as well as Ultra High-Definition ClearVü™ and SideVü™ scanning sonars<sup>1</sup> plus CHIRP traditional sonar. Both wired and/or wireless networking lets you share sonar, waypoints and routes with another ECHOMAP Ultra 2 or ECHOMAP UHD2 chartplotter on your boat (optional LiveScope sonar cannot be shared wirelessly). A handy screen recording feature lets you capture what you see on the chartplotter through the ActiveCaptain® app on your compatible smartphone. Select models come with Garmin Navionics+™ maps featuring Auto Guidance+™ technology<sup>2</sup>, and all models support premium Garmin Navionics Vision+™ map upgrades. With a wireless connection to your Force® trolling motor, you can create and follow routes, navigate to waypoints, control speed and more.

KEYED-ASSIST TOUCHSCREEN DISPLAY

BUILT-IN CHIRP TRADITIONAL AND ULTRA HIGH-DEFINITION, CLEARVÜ AND SIDEVÜ SCANNING SONAR<sup>1</sup>

PRELOADED WITH GARMIN NAVIONICS+ INTEGRATED COASTAL AND INLAND DATA

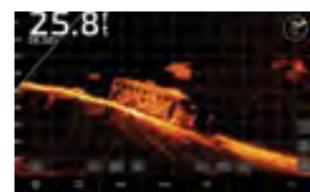
WIRELESSLY SHARE SONAR, WAYPOINTS, MAPS AND ROUTES<sup>3</sup> WITH ANOTHER UHD2 OR ULTRA 2 CHARTPLOTTER

## ULTRA HIGH-DEFINITION SONAR



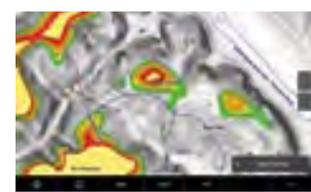
Built-in support for the Ultra High-Definition scanning sonar system, no black box needed.

## LIVESCOPE™



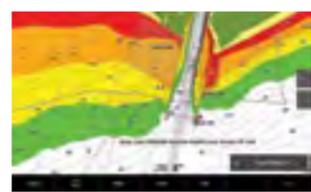
Supports LiveScope sonar.

## GARMIN NAVIONICS+ U.S. INLAND MAPS



Highly detailed inland maps featuring Navionics data.

## GARMIN NAVIONICS+ U.S. COASTAL CHARTS



Highly detailed coastal maps featuring Navionics data.

## ADDITIONAL SERIES FEATURES

Built-in Quickdraw Contours mapping software instantly creates personalized fishing maps on-screen with 1' contours as you fish

Built-in Wi-Fi® connectivity pairs with free ActiveCaptain® app for access to OneChart™ to purchase and download new charts; also receive smart notifications<sup>3</sup>, software updates, Garmin Quickdraw™ Community data and more

Network capable with NMEA 2000® connectivity and support for heading sensors, autopilots, digital switching and Fusion Audio and more

Quick-disconnect bail mount

Compatible with Force® trolling motors for full control of the motor from the chartplotter screen, plus the ability to route to waypoints, follow tracks and more

Wirelessly share sonar, waypoints and routes with another ECHOMAP™ Ultra 2 or ECHOMAP UHD2 chartplotter on board (optional LiveScope™ sonar cannot be shared wirelessly).

Available with or without included transducer • <sup>2</sup>Auto Guidance is for planning purposes only and does not replace safe navigation operations • <sup>3</sup>When paired with a compatible smartphone, see [Garmin.com/ble](http://Garmin.com/ble) • Wi-Fi is a registered trademark of the Wi-Fi Alliance.

# ECHOMAP™ UHD2 6", 7", AND 9" SV SERIES

# ECHOMAP™ UHD2 5" AND 7" CV SERIES



6"

010-02679-01 | 62sv + transducer  
010-02679-00 | 62sv 63sv + transducer  
010-02680-01 | 63sv  
010-02681-00 | 64sv 64sv + transducer

7"

010-02679-01 | 62sv  
010-02683-00 | 72sv  
010-02683-01 | 72sv + transducer  
010-02684-00 | 73sv  
010-02684-01 | 73sv + transducer  
010-02685-00 | 74sv  
010-02685-01 | 74sv + transducer  
010-02686-00 | 75sv  
010-02686-01 | 75sv + transducer

9"

010-02687-00 | 92sv  
010-02687-01 | 92sv + transducer  
010-02688-00 |  
010-02688-01 | 93sv + transducer  
010-02689-01 | 94sv + transducer  
010-02689-00 | 94sv

These 6", 7" and 9" touchscreen chartplotter/sonar combos with keyed assist<sup>1</sup> include or support transducers for Ultra High-Definition ClearVü™ and SideVü™ scanning sonar plus Garmin CHIRP traditional sonar. They're also compatible with LiveScope™ live-scanning sonar, and premium Garmin Navionics Vision+™ charts.



5"

010-02590-51 | 53cv  
010-02591-50 | 54cv  
010-02591-51 | 54cv + transducer

7"

010-02594-51 - 73cv + transducer  
010-02595-51 | 74cv + transducer

Fish like a local with these easy-to-use 5" and 7" keyed chartplotter/sonar combos. Get clear, high-contrast views below your boat with Garmin traditional and ClearVü™ scanning sonars<sup>1</sup>. Know the waters you're in as if you grew up fishing them by using preloaded Garmin Navionics+™ mapping.



BRIGHT, SUNLIGHT-READABLE DISPLAY

BUILT-IN CHIRP TRADITIONAL AND CLEARVÜ SCANNING SONAR

PRELOADED WITH GARMIN NAVIONICS+ INTEGRATED COASTAL OR INLAND DATA

SHARE SONAR, WAYPOINTS AND ROUTES WITH OTHER ECHOMAP DEVICES



BUILT-IN CHIRP TRADITIONAL AND ULTRA HIGH-DEFINITION CLEARVÜ AND SIDEVÜ SCANNING SONAR<sup>2</sup>

WIRELESSLY SHARE SONAR, WAYPOINTS, MAPS AND ROUTES WITH ANOTHER UHD2 CHARTPLOTTER<sup>2</sup>

NMEA 2000® AND NMEA 0183 NETWORK SUPPORT FOR AUTOPILOT AND ENGINE DATA

AVAILABLE WITH BUILT-IN GARMIN NAVIONICS+ COASTAL OR INLAND DATA WITH AUTO GUIDANCE+ TECHNOLOGY<sup>3</sup>



## ULTRA HIGH-DEFINITION SONAR



Built-in support for the Ultra High-Definition scanning sonar system, no black box needed.

## LIVESCOPE™



Features built-in support for LiveScope system sonar and the full line of live sonar products (optional transducers sold separately).

## PRELOADED MAPPING



Navigate coastal or inland waters with available built-in Garmin Navionics+™ charts featuring Auto Guidance+ technology<sup>3</sup>.

## FORCE™ TROLLING MOTOR COMPATIBLE



Get full control of the motor from the screen, plus the ability to route to waypoints, follow tracks and more (7" and 9" models only).

## ADDITIONAL SERIES FEATURES

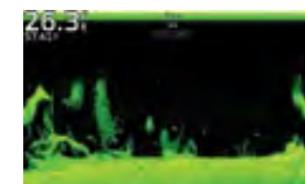
Quick-release bail mount for fast and easy mobility

Built-in Wi-Fi® connectivity pairs with free ActiveCaptain® app for access to OneChart™ to purchase and download new charts; also receive smart notifications<sup>4</sup>, software updates, Garmin Quickdraw™ Community data and more

7" and 9" models are compatible with Force™ trolling motor for full control of the motor from the chartplotter screen, plus the ability to route to waypoints, follow tracks and more

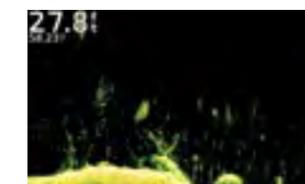
7" and 9" models can share sonar, waypoints and routes with other ECHOMAP UHD 7" and 9" units and ECHOMAP Ultra 10" and 12" units

## SONAR SUPPORT



With crisp, clear traditional sonar and brilliant ClearVü sonar, the fish will have nowhere to hide.

## VIVID COLOR PALETTES



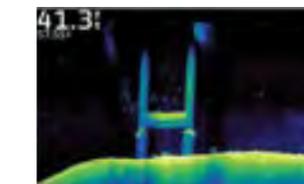
High-contrast vivid scanning sonar color palettes make it easier than ever to distinguish targets and structure.

## BUNDLE YOUR TRANSDUCER



Your ECHOMAP UHD2 device supports a variety of Garmin transducers for two types of sonar: Garmin traditional and ClearVü scanning sonar.

## WIRELESS NETWORKING



If you have another compatible ECHOMAP UHD2 chartplotter on your boat, the 5" and 7" models can wirelessly share information — such as sonar, waypoints and routes — with them.

## ADDITIONAL SERIES FEATURES

Use built-in Wi-Fi® networking to pair with the free ActiveCaptain® app for access to OneChart™, smart notifications, software updates and more<sup>2</sup>

Choose preloaded Garmin Navionics+™ integrated coastal and inland data with support for premium Garmin Navionics Vision+™ marine charts

<sup>1</sup>Available with or without included transducer • <sup>2</sup>LiveScope sonar cannot be shared wirelessly between two Echomap UHD2 chartplotters. CV units support ClearVü sonar only. SV units support both ClearVü and SideVü sonars. • <sup>3</sup>Auto Guidance is for planning purposes only and does not replace safe navigation operations • <sup>4</sup>When paired with a compatible smartphone; see Garmin.com/ble

<sup>1</sup>Transducer required (sold separately)

<sup>2</sup>Requires the ActiveCaptain app on your compatible smartphone paired to the ECHOMAP UHD2 5" and 7" chartplotters

# TROLLING MOTORS



# FORCE® PRO TROLLING MOTOR

Move fast, move quiet, move your fishing to a higher level with the Force Pro trolling motor from Garmin. Delivering 100 lbs of thrust (in compliance with ISO standard 13342), it's incredibly powerful. Yet it's also highly efficient, so you can count on it to fish all day.

Featuring a scissor-style mount and your choice of 50" or 57" shaft lengths, Force Pro is designed specifically for bass boats. See everything around your boat with brilliant high-definition scanning sonar with the included all-in-one GT56UHD transducer. And once you've found the spot, stay put with our most precise anchor lock technology, now featuring reverse prop spin and calm-water cable unwrap to reduce motor activity. Make speed and steering adjustments wirelessly from anywhere on the boat with the included foot pedal or included remote with gesture control. In fact, you can even connect wirelessly with your compatible Garmin smartwatch to control steering, anchor lock and more, right from your wrist.

You can also use your integrated chartplotter to draw a route, and the trolling motor will automatically navigate while you fish. The lighted indicator on the Force Pro trolling motor shaft cap means you can fish in low light and always know what direction you're headed.

Built with advanced corrosion and saltwater protection for harsh marine environments, Force Pro is the fishing companion you can count on year after year. And when the day's fishing is done, it's easy to hoist and stow the motor, thanks to dual gas springs and a durable pull cable.

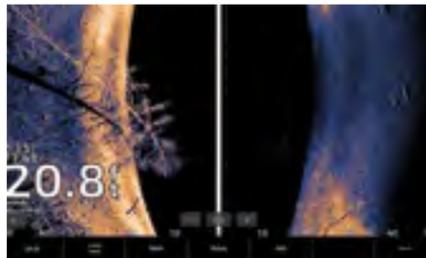
Force Pro Trolling Motor 50" - Part no. 010-03011-00  
Force Pro Trolling Motor 57" - Part no. 010-03011-10



## CHARTPLOTTER INTEGRATION



Simple integration with your Garmin chartplotter via a wireless connection makes using the built-in autopilot easy. Create routes to your favorite waypoint and follow tracks while you fish.



The Force Pro trolling motor comes with an integrated GT56UHD transducer with CHIRP traditional and Ultra High-Definition ClearVü™ and SideVü™ scanning sonars with imperceptible sonar noise interference.

## ADDITIONAL SERIES FEATURES

- Includes the power you need to counter winds and currents with the efficiency to fish all day
- Wireless chartplotter integration and built-in autopilot get you to fish, along with anchor lock to stay on them
- Wireless foot pedal provides instant control and responsiveness; feels and steers like a cable-steered pedal
- Includes integrated CHIRP traditional and Ultra High-Definition ClearVü and SideVü scanning sonars with imperceptible sonar noise interference
- Floating remote control gives you full control of the trolling motor and simple point-and-go gesture steering



## WIRELESS FOOT PEDAL

Part no. : 010-12834-00



Enjoy the convenience of a wireless foot pedal. It provides instant control and responsiveness yet feels and steers just like a cable-steered pedal. It operates wirelessly using AA batteries, or – if you prefer – it can be hardwire installed.

## REMOTE CONTROL

Part no. : 010-12833-00

The included handheld remote control with a sunlight-readable, transfective display offers total control of the trolling motor from anywhere on your boat along with unique point-and-go gesture steering capabilities. There are also user-programmable keys on the remote, which you can use for control of your chartplotter. No need to worry if the remote takes a trip overboard, because it's water-resistant, and it floats.



# FORCE® KRAKEN TROLLING MOTOR



With its extended shaft lengths, pivot-style mount and top-rated 100 lbs of thrust (in compliance with ISO standard 13342), Force Kraken is a powerful new addition to the Garmin trolling motor lineup. Designed for deep V hulls and deck configurations where bow space is limited, the Force Kraken gives you the power you need for boat maneuverability in high winds or strong current – plus the run-time efficiency to stay out on the water longer. Get a clear view of what's below your boat with the available GT56 transducer<sup>1</sup>. Then, once you've found the spot, stay put with our most precise anchor lock technology.

## MORE FEATURES, MORE FLEXIBILITY

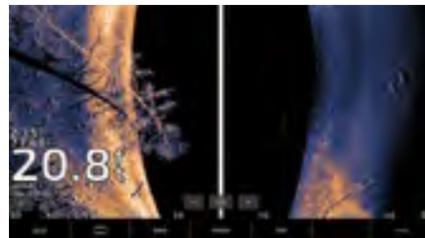
LiveScope™ live sonar (sold separately) is easy to add, thanks to the ability to run the cable through the trolling motor shaft. The sturdy pivot-style mount frees up space on the deck, and the 48", 63", 75" and 90" shaft lengths accommodate boats with high freeboards. Draw a route with wireless chartplotter integration, and let the trolling motor automatically navigate the route while you fish. The included remote makes speed and heading adjustments easy from anywhere on the boat. Plus, it's saltwater-rated for advanced corrosion protection.

- Force Kraken Trolling Motor 48", Black with GT56 xdrc - Part no. 010-02573-30
- Force Kraken Trolling Motor 48", White without xdrc - Part no. 010-02574-30
- Force Kraken Trolling Motor 63", Black with GT 56 xdrc - Part no. 010-02573-00
- Force Kraken Trolling Motor 63", White without xdrc - Part no. 010-02574-00
- Force Kraken Trolling Motor 75", Black with GT 56 xdrc - Part no. 010-02573-10
- Force Kraken Trolling Motor 75", White without xdrc - Part no. 010-02574-10
- Force Kraken Trolling Motor 90", White without xdrc - Part no. 010-02574-20

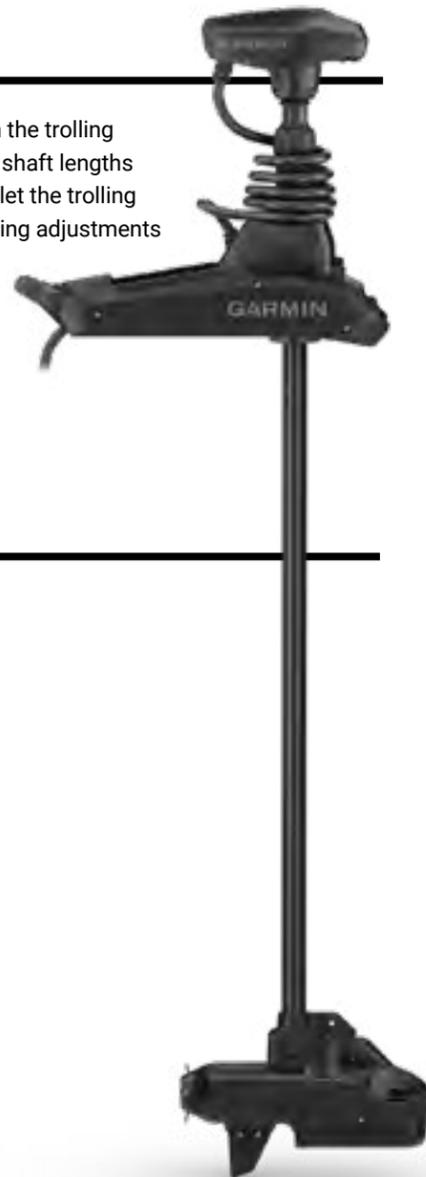
## CHARTPLOTTER INTEGRATION



Wireless integration with your Garmin chartplotter allows you to create routes, patterns and tracks for the trolling motor to follow while you fish.



An integrated GT 56 transducer is available with black versions of the trolling motor, providing brilliant Ultra High-Definition sonar with virtually imperceptible electrical noise interference.



## ADDITIONAL SERIES FEATURES

- The powerful Force® Kraken's 100 lbs. of thrust<sup>1</sup> are more than strong enough to counter winds and currents
- Sturdy composite shaft is built to endure harsh marine environments
- Anchor lock provides our most precise boat positioning, thanks to multi-band GPS and integrated AHRS for heading hold
- Efficient brushless motor design is optimized to operate in rough, open-water conditions at either 24 or 36 volts
- Included remote control device allows you to use point-and-go gesture steering to control the trolling motor – and it floats
- Brushless motor design produces minimal electronic interference for clear sonar returns

## INCLUDED REMOTE CONTROL

Part no. : 010-12833-00

For hands-free convenience, the included remote control with sunlight-readable display lets you control the trolling motor from anywhere on your boat, using its unique point-and-go gesture steering capabilities. Programmable keys on the device can be used to control your chartplotter. And for extra peace of mind, the remote will float if it's ever dropped overboard.



<sup>1</sup>GT56 transducer comes with the black versions of the trolling motor only

<sup>1</sup>In compliance with ISO standard 13342

# RADARS



# GMR FANTOM™ RADARS

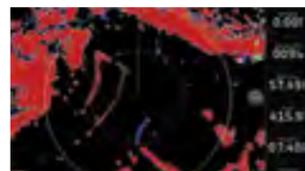


## GMR FANTOM™ OPEN ARRAY RADARS

With up to 250 watts of power, the GMR Phantom™ solid-state radars use MotionScope™ technology to detect and highlight moving targets in different colors, which helps you avoid potential collisions, find flocks of birds and track weather. Their Pulse Compression technology provides high-resolution imaging and maximizes energy to help you detect and identify targets. True echo trails gives you a fading trail on moving targets while accounting for the movement of your boat. Auto bird gain helps you identify flocks of birds on the water. GMR Phantom radars have a detection range up to 96 nautical miles.

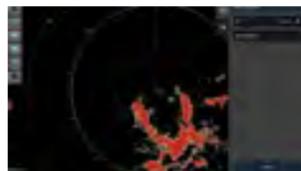
## SPECIAL FEATURES

### MOTIONSCOPE TECHNOLOGY



Detect and highlight moving targets in different colors to help avoid collisions, find flocks of birds and track weather from 20' up to 96 nautical miles.

### AUTOMATIC MARPA ACQUISITION



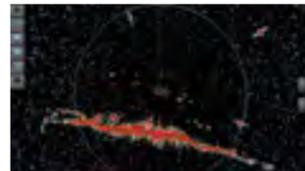
Enables automatic triggering and tracking of up to 30 MARPA traffic targets with no user prompting required.

### SCAN-TO-SCAN AVERAGING



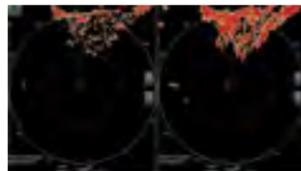
This technology aids in the reduction of sea clutter and interference so you have a clear view of what's out there.

### AUTO BIRD GAIN



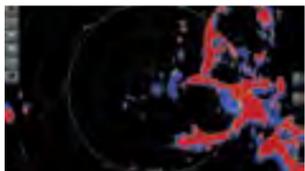
Where there are birds on the water's surface, there are often fish below it. Auto bird gain helps you locate flocks of birds at the water's surface.

### PULSE COMPRESSION



This feature provides high-resolution imaging while maximizing energy to enhance target detection and identification.

### ECHO TRAILS



The radar's true echo trails feature displays a historical "trail" on the screen to help you quickly identify moving targets.

# GMR FANTOM™ RADARS



Fantom dome radars also feature MotionScope™ technology to help you avoid potential collisions, find birds and track weather. These radars pack a punch with up to 50 watts of power, dual range with overlay and more.

## FEATURED — GMR FANTOM™ 18X/24X

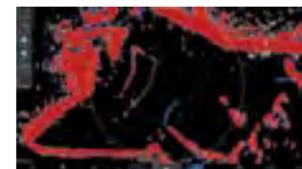
MOTIONSCOPE TECHNOLOGY

PULSE COMPRESSION TECHNOLOGY

TRUE ECHO TRAILS HELP YOU QUICKLY IDENTIFY MOVING TARGETS IN RELATION TO YOUR BOAT

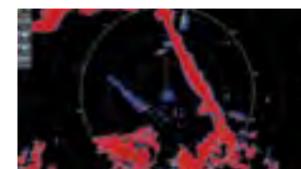
MARPA AUTOMATIC ACQUISITION ALLOWS FOR TRIGGERING AND TRACKING WITH NO USER PROMPTING

### MOTIONSCOPE



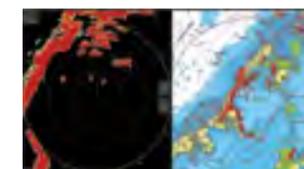
MotionScope technology highlights moving targets so you can navigate around other boats or severe weather — or toward birds feeding at the surface.

### ECHO TRAILS



The echo trails feature leaves a historical "trail" on the screen to help you quickly identify moving targets.

### DUAL RANGE WITH OVERLAY



Dual-range overlays show close and long-range, split-screen images at the same time.

### AUTO BIRD GAIN



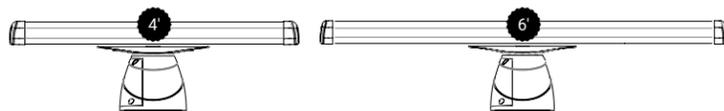
Auto bird gain helps locate flocks of birds at the water's surface where baitfish are also likely to be found.

## THE LINEUP

	GMR Phantom 18X White 010-02584-00 Black 010-02584-10	GMR Phantom 24X White 010-02585-00 Black 010-02585-10	GMR Phantom 54 White K10-00012-17 Black K10-00012-30	GMR Phantom 56 White K10-00012-18 Black K10-00012-31	GMR Phantom 124 White K10-00012-19 Black K10-00012-32	GMR Phantom 126 White K10-00012-20 Black K10-00012-33	GMR Phantom 254 White K10-00012-22 Black K10-00012-34	GMR Phantom 256 White K10-00012-22 Black K10-00012-35
<b>Wattage</b>	50	50	50	50	120	120	250	250
<b>Dome Dimension</b>	20" dia., 9.8" high	25.4" dia., 9.8" high						
<b>Open Array</b>			4'	6'	4'	6'	4'	4'
<b>Dynamic Auto Gain and Sea Filter Settings</b>	•	•	•	•	•	•	•	•
<b>Target Size Adjustment</b>	•	•	•	•	•	•	•	•
<b>MARPA Target Tracking</b>	Yes <sup>1</sup>	Yes <sup>1</sup>	Yes <sup>1</sup>	Yes <sup>1</sup>	•	•	•	•
<b>Dual Radar Support</b>	•	•	•	•	•	•	•	•
<b>Guard Zone</b>	•	•	•	•	•	•	•	•
<b>RPM</b>	24/48	24/48	24/48	24/48	24/48	24/48	24/48	24/48
<b>Beam Width</b>	5.2° horizontal, 25° vertical	3.7° horizontal, 25° vertical	1.8° horizontal, 23° vertical	1.25° horizontal, 23° vertical	1.8° horizontal, 23° vertical	1.25° horizontal, 23° vertical	1.8° horizontal, 23° vertical	1.25° horizontal, 23° vertical
<b>Minimum Range</b>	6 meters	6 meters	6 meters	6 meters	6 meters	6 meters	6 meters	6 meters
<b>Maximum Range</b>	48 nm	48 nm	72 nm	72 nm	96 nm	96 nm	96 nm	96 nm

<sup>1</sup>Requires heading sensor, sold separately

# GMR™ XHD3 OPEN-ARRAY RADARS



Designed for serious seafaring on yachts and sport fishing boats, these robust 4' and 6' open-array radars incorporate the latest Garmin magnetron technology to deliver high-definition imaging at all ranges for superior weather, obstacle and traffic detection. Antennas are built to withstand harsh conditions with a 100-knot commercial grade wind rating<sup>1</sup>.

## FEATURED — GMR XHD3 SERIES

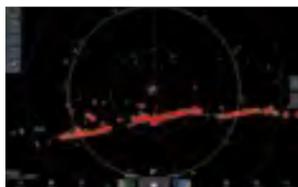
- CHOOSE 4, 12 OR 25 KW OF POWER OUTPUT FOR UP TO 96 NAUTICAL MILE RANGE
- ADVANCED SCAN AVERAGING TECHNOLOGY FILTERS OUT SEA CLUTTER
- PULSE EXPANSION MAXIMIZES ENERGY ON TARGET
- OVERLAY RADAR ONTO CHART SCREEN AS A SINGLE DISPLAY OR SPLIT SCREEN WITH INDEPENDENT RANGE SETTINGS

### SCAN AVERAGING



A first for Garmin magnetron radar, scan averaging helps filter out sea clutter and interference to enhance the detection and display of consistent targets.

### ANGULAR TARGET SIZE ADJUSTMENT



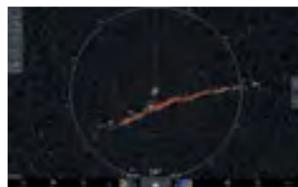
Advanced image processing helps improve object shapes on-screen to optimize target interpretation at all range scales.

### TRUE ECHO TRAILS



A historical "trail" of boats on the water is displayed on the screen, removing relative motion influence to help you quickly identify moving targets and potential collision threats.

### AUTO BIRD GAIN AND BIRD MODE



Use these features to help locate flocks of birds at the water's surface where baitfish are also likely to be found.

## THE LINEUP

	GMR 434/436 XHD3 K10-00012-24 / K10-00012-25	GMR 1234/1236 XHD3 K10-00012-26 / K10-00012-27	GMR 2534/2536 XHD3 K10-00012-28 / K10-00012-29
Transmit Power	4 kW	12 kW	25 kW
Dimensions (diameter)	1938 mm (GMR 436) 1325 mm (GMR 434)	1938 mm (GMR 1236) 1325 mm (GMR 1234)	1938 mm (GMR 2536) 1325 mm (GMR 2534)
Rotation Speed (revolutions/min)	24 and 48	24 and 48	24 and 48
Weight	29.6 kg (GMR 436) 27.6 kg (GMR 434)	29.7 kg (GMR 1236) 27.7 kg (GMR 1234)	30.4 kg (GMR 2536) 28.4 kg (GMR 2534)
Horizontal Beamwidth	1.1° (GMR 436) 1.8° (GMR 434)	1.1° (GMR 1236) 1.8° (GMR 1234)	1.1° (GMR 2536) 1.8° (GMR 2534)
Vertical Beamwidth	23°	23°	23°
Maximum/Minimum Range	72 nautical miles / 20 meters	96 nautical miles / 20 meters	96 nautical miles / 20 meters
Waterproof According to Standard	IPX6	IPX6	IPX6
Power Supply	11-32 V	10-32 V	10-32 V
Power Consumption (typical)	55 W	70 W	70 W
Power Consumption (standby)	18 W	18 W	18 W
Temperature Range	-25 to 55 C	-25 to 55 C	-25 to 55 C
Guard Zone with Alarm	Yes	Yes	Yes
Cable Length	15 meters	15 meters	15 meters
Polarization	Horizontal	Horizontal	Horizontal
Trails	True	True	True
Dual Range	Yes	Yes	Yes

<sup>1</sup>4-kW versions require optional equipment (sold separately) for 100-knot wind rating

# GMR™ XHD3 DOME RADARS



Loaded with advanced features typically found on open arrays, these 4-kW magnetron radars – in 18" or 24" sizes – bring high-definition imaging and fast target updates to boaters who want a quiet, compact dome radar for cruising or fishing offshore. Scan averaging, a first for Garmin magnetron radar, results in reduced sea clutter and interference on the display.

## FEATURED — GMR XHD3 SERIES

- 4 KW OF POWER OUTPUT FOR UP TO 48 NAUTICAL MILE RANGE
- ADVANCED SCAN AVERAGING TECHNOLOGY FILTERS OUT SEA CLUTTER
- ROTATION SPEEDS UP TO 60 RPM FOR FAST REDRAW RATES
- DUAL-RANGE OVERLAYS SHOW CLOSE AND DISTANT RADAR IMAGES WITH SPLIT-SCREEN VIEW

## THE LINEUP

	GMR 24 XHD3 010-02842-00	GMR 18 XHD3 010-02841-00	GMR 18 HD3 010-02843-00
4 kW Transmit Power	•	•	•
Dual Range	•	•	•
Radar Overlay Support	•	•	•
Power Consumption	40 W typical	40 W typical	40 W typical
Power Input	11-32 V DC	11-32 V DC	11-32 V DC
RPM	Up to 60 rpm, depending on settings	Up to 60 rpm, depending on settings	24
Beam Width	3.7° horizontal, 25° vertical	5.2° horizontal, 25° vertical	5.2° horizontal, 25° vertical
Trails	True	True	No
Minimum Range	20 meters	20 meters	20 meters
Maximum Range	48 nautical miles	48 nautical miles	36 nautical miles

## GMR™ HD3 DOME RADARS

For high-performance scanning at an entry-level price, the 18" GMR™ HD3 dome radars are designed for mariners who want to make the most of their time on the water. These robust 4-kW magnetron radars offer reliable target detection to maximize situational awareness in low-visibility conditions.

- 4 KW OF POWER OUTPUT FOR UP TO 36 NAUTICAL MILE RANGE
- DUAL RADAR SUPPORT FOR ADDED REDUNDANCY
- 48 OR 24 RPM ROTATION SPEEDS
- DYNAMIC AUTO GAIN ADJUSTS TO CONDITIONS



# SONAR BLACK BOXES



# SONAR BLACK BOXES

## GSD™ 28



Take your sport fishing to extreme depths with this high-powered sonar module with Garmin RapidReturn™ sonar and xCHIRP technology for crisp and clear fish arches.

## GSD™ 25



The GSD 25 premium 1 kW CHIRP traditional sonar module is a remote network solution that provides outstanding fish-finding and bottom-tracking capabilities with CHIRP ClearVü and CHIRP SideVü scanning sonar.

## GSD™ 24



With up to 2,000 watts of transmit power and a high-dynamic range receiver, the GSD 24 brings high-definition, dual-frequency imaging to your compatible Garmin chartplotter.

## GCV™ 20



The Garmin GCV 20 Ultra High-Definition black box sonar adds both SideVü™ and ClearVü™ with CHIRP scanning sonar technology to your compatible Garmin chartplotter.

## THE LINEUP

	GSD 28 010-02797-00	GSD 25 010-01159-00	GSD 24 010-00957-00	GCV 20 010-02055-10
Garmin Marine Network Ports	1 Garmin BlueNet™	1	1	3
Frequencies Supported	Dual Channel CHIRP: 25-250 kHz (dependent on transducer)	Traditional: 50/200, 77/200, 83/200 Single Channel CHIRP: 40-250 Dual Channel CHIRP: 40-250 SideVü/ClearVü: CHIRP 455/800 and CHIRP 260/455 (dependent on transducer)	50/200 kHz	Ultra High-Definition ClearVü: 0.8 MHz (800 kHz), CHIRP range: 760-880 kHz Ultra High-Definition SideVü: 1.2 MHz (1,200 kHz), CHIRP range: 1,060-1,170 kHz
Transmit Power	300w-3kW rms (dependent on transducer)	1 kW	25-2,000 W rms	500 W rms
ClearVü/Sideü		•		•
Max Depth	10,000' (3,048 m)	5,000' (1,524 m)	5,000' (1,524 m)	200' Ultra High-Definition ClearVü 125' to each side Ultra High-Definition SideVü 250' total, at a maximum depth of 30'
Traditional CHIRP Capable	•	•		
xCHIRP Capable	•			
Power Input	10-32 V	10-35 V	10-35 V	
Power Usage	120 W maximum	27 W maximum	40 W maximum	
Compass-safe Distance	75" (190 cm)	11.8" (30 cm)	15.7" (40 cm)	10.2" (26 cm)
RapidReturn Sonar Technology	•			



# AUTOPILOTS



# GHP REACTOR™ 40 AUTOPILOT SERIES



The Reactor 40 hydraulic autopilot keeps you on course at cruising speeds, minimizes heading error, reduces power consumption and more so you can be more comfortable while cruising. Solid-state 9-axis attitude heading reference system (AHRS) sensors provide reliable vessel control in all sea and weather conditions and consistent heading accuracy within 2 degrees.

Our Shadow Drive™ technology lets you easily take back control of the helm just by turning the wheel — automatically disengaging the autopilot. It's easy to control from your compatible Garmin chartplotter, and Reactor 40 can follow auto-guided routes<sup>1</sup> with compatible chartplotters and Garmin Navionics+™ and Garmin Navionics Vision+™ charts, as well as legacy BlueChart® g3 and g3 Vision charts. Flexible mounting options and quick, simple commissioning make installation easier.

For boats without a good, clean magnetic location to mount the CCU, Reactor 40 also supports heading inputs from third-party NMEA 2000® sensors such as GPS compasses.



## ADDITIONAL SERIES FEATURES

- 9-axis AHRS sensors provide reliable vessel control in all sea and weather conditions and consistent heading accuracy within 2 degrees.
- Shadow Drive technology automatically disengages the autopilot when you turn the wheel.
- Control the autopilot directly from the screen of your compatible chartplotter.
- Access Auto Guidance+<sup>1</sup> with compatible chartplotters and Garmin Navionics+ and Garmin Navionics Vision+ charts. Auto Guidance is also available with BlueChart g3 and g3 Vision charts.
- Supports third-party heading sensors or GPS compasses via the NMEA 2000 network.

## ACCESSORIES FOR REACTOR AUTOPILOTS



**GHC™ 50 CONTROL UNIT**  
Part no: 010-02731-00

With its 5" WVGA edge-to-edge glass touchscreen interface and both wireless and wired control options, the GHC 50 autopilot instrument is styled to match the latest GPSMAP® premium chartplotters. It's powered by the NMEA 2000 network for seamless connectivity with Garmin MFDs and other units on your vessel.



**APK™ 10 AUTOPILOT KEYPAD**  
Part no: Horizontal 010-03197-00  
Vertical 010-03197-01

Get precise control of your autopilot in all sea conditions with this easy-to-use tactile control panel accessory. It works with your Reactor 40 autopilot and GHC 50 autopilot instrument to allow simple, intuitive knob and button activation, heading changes and more.



**REACTOR™ AUTOPILOT REMOTE**  
Part no: 010-12833-10

The ultimate in onboard freedom and convenience all in the palm of your hand. Bright color display and new gesture controls let you course-correct with ease.



**GRF™ 10 RUDDER SENSOR**  
Part no: 010-11829-00

Pair this GRF 10 rudder feedback sensor with your autopilot to provide rudder position feedback to detect and avoid rudder stops.



**GNA 10 JOG LEVER ADAPTER**  
Part no: 010-13007-00

Use the GNA 10 to connect a jog lever to Reactor 40 autopilots on displacement hull work boats or trawlers. Adjust heading hold with the jog lever or access power steering mode to move the rudder without autopilot guidance.

## GHP™ REACTOR 40 STEER-BY-WIRE AUTOPILOT

These corepacks bring our GHP Reactor 40 autopilot technology to vessels with select steer-by-wire control systems, including Yanmar® Electric Power Steering for the JC10 Joystick system, Teleflex® Optimus™ systems, Yamaha® Helm Master™ systems, Volvo Penta® Inboard Performance Systems and ZF® 2800 Pod Drive steering systems.



**GHP REACTOR 40 STEER-BY-WIRE STANDARD COREPACK**  
Part no: 010-02794-03



**GHP REACTOR 40 STEER-BY-WIRE YAMAHA® HELM MASTER™ COREPACK**  
Part no: 010-02794-04



**GHP REACTOR 40 STEER-BY-WIRE VOLVO PENTA® COREPACK**  
Part no: 010-02794-06

## ADDITIONAL SERIES FEATURES

- Solid-state 9-axis AHRS, reacts to the sea to hold course, even when the boat is unstable
- Standard corepack: supports steering systems from Yanmar® JC10 Joystick system, Teleflex® Optimus™ systems and ZF® 2800 system
- Corepack for Yamaha®: supports Yamaha Helm Master systems
- Corepack for Volvo Penta®: supports Volvo Penta IPS and stern drive joystick systems
- Minimizes heading error, course deviation, rudder movement, power consumption, while providing a comfortable ride
- Mounts in any orientation
- NMEA 2000 interface
- Minimal commissioning and calibration takes just five minutes
- Provides advanced features to compatible Garmin chartplotters such as route following, route engage, and Autopilot Virtual Device
- Connects to up to 3 GHC™ 50 control units
- Add optional Autopilot Remote for control anywhere on your boat

<sup>1</sup>Auto Guidance is for planning purposes only and does not replace safe navigation operations. NMEA®, NMEA 2000®, and the NMEA 2000 logo are registered trademarks of the National Marine Electronics Association.

# GHP™ REACTOR 40 HYDRAULIC AUTOPILOTS

GHP REACTOR 40 HYDRAULIC COREPACK (PUMP SOLD SEPARATELY) Part no: 010-02794-00  
 GHP REACTOR 40 HYDRAULIC WITH SMARTPUMP COREPACK Part no: 010-02794-01

This robust unit gives powerboat users an easy-to-use autopilot system to rely on for navigation. The optional SmartPump features a more powerful, brushless motor-driven pump that is suitable for most users. It offers Intelligent Rudder Rate Technology (IRRT) which adjusts the rudder speed to the speed of your boat to ensure safer and more stable operation.



## ADDITIONAL SERIES FEATURES

- Complete packages designed for hydraulically steered powerboats and sailboats
- Solid-state 9-axis AHRS, reacts to the sea to hold course, even when the boat is pitching and rolling
- Minimizes heading error, course deviation, rudder movement, power consumption, while providing a comfortable ride
- Mounts in any orientation
- Minimal commissioning and calibration takes just five minutes
- One SmartPump™ fits most hydraulically steered boating applications
- NMEA 2000 interface

- Small, brushless SmartPump™ delivers better thermal performance, higher reliability, and lower power consumption
- Optimal performance for all steering cylinder sizes from 4 to 17 cubic inches
- Intelligent Rudder Rate Technology (IRRT)
- Patented Shadow Drive™ technology keeps you in control even when autopilot is engaged
- Provides advanced features to compatible Garmin chartplotters such as route following, route engage, and Autopilot Virtual Device
- Connects to up to 3 GHC™ 50 control units

## PUMPS

### 1.2-LITER PUMP KIT

Part no: 010-00705-64



### 2-LITER PUMP KIT

Part no: 010-00705-63



# GHP REACTOR™ 40 MECHANICAL AUTOPILOT

GHP REACTOR 40 MECHANICAL / RETROFIT / SOLENOID COREPACK Part no: 010-02794-02

You never know when an extra crew member can come in handy. Maybe the wind picks up, and you have to leave the wheel to raise the sails or pull in fenders. Even in calm conditions, you sometimes need to hand over to someone else. That's where this below-deck autopilot system comes in, ideally suited for sailboats or powerboats with direct or cable-actuated steering systems.



## ADDITIONAL SERIES FEATURES

- Ideal for sailboats with direct or cable-actuated steering systems
- Retrofit with your existing autopilot actuator or use with one of several Garmin linear actuator options (sold separately)
- Solid-state 9-axis AHRS, reacts to the sea to hold course, even when the boat is pitching and rolling
- Minimises heading error, course deviation, rudder movement, power consumption, while providing a comfortable ride
- Mounts in any orientation
- Minimal commissioning and calibration takes just five minutes
- Engineered from corrosion-resistant components

- NMEA 2000 interface
- Enter your boat's displacement or its planning speed, and Reactor will take into consideration the various steering characteristics that are required
- Provides advanced features to compatible Garmin chartplotters such as route following, route engage, and Autopilot Virtual Device
- Connects to up to 3 GHC™ 50 control units
- The Reactor 40 autopilot can follow auto-guided routes<sup>1</sup> with compatible chartplotters and Garmin Navionics+™ and Garmin Navionics Vision+™ charts, as well as legacy BlueChart® g3 and g3 Vision charts
- Add optional Autopilot remote for control anywhere on your boat

## DRIVE UNITS

### CLASS A MECHANICAL DRIVE UNIT FOR BOATS UP TO 13 TONS

Part no: 010-11572-00



### CLASS B COMPACT HYDRAULIC DRIVE UNIT FOR BOATS UP TO 22 TONS

Part no: 010-12029-01



### CLASS B HYDRAULIC DRIVE UNIT FOR BOATS UP TO 36 TONS

Part no: 010-11573-00



<sup>1</sup>Auto Guidance+ is for planning purposes only and does not replace safe navigation operations

## GHP™ COMPACT REACTOR 40 HYDRAULIC AUTOPILOTS

Designed for boats less than 30 feet long to provide relief from manually holding the wheel to maintain course in heavy currents or winds<sup>1</sup>. Solid-state 9-axis AHRS technology delivers less heading error, course deviation, rudder movement, power consumption and a more comfortable ride. Easy to install with flexible mounting options and quick, easy commissioning via a compatible chartplotter or GHC™ 50.



**GHP COMPACT REACTOR 40 HYDRAULIC COREPACK WITH GHC™ 50 AND SHADOW DRIVE™**  
Part no: 010-02794-08



**GHP COMPACT REACTOR 40 HYDRAULIC COREPACK WITH GHC 50**  
Part no: 010-02794-07



**GHP COMPACT REACTOR 40 HYDRAULIC COREPACK**  
Part no: 010-00705-06

### ADDITIONAL SERIES FEATURES

- Solid-state 9-axis AHRS, reacts to the sea to hold course, even when the boat is unstable
- Designed for boats less than 30 feet long
- Available in two-pack configurations:
  - GHP Compact Reactor Hydraulic Autopilot with GHC 50 and Shadow Drive™
  - GHP Compact Reactor Hydraulic Autopilot with GHC 50 and GHP Compact Reactor Hydraulic Autopilot
- Provides an extra set of hands, relief from manually holding the wheel to remain on course in heavy currents or winds
- Easy-to-install CCU provides flexible mounting options and quick, easy commissioning
- NMEA 2000 interface
- Minimal commissioning and calibration takes just five minutes
- 1 L geared pump supports hydraulic steering cylinders up to 10 cubic inches
- Provides advanced features to compatible Garmin chartplotters such as route following, route engage, and Autopilot Virtual Device
- Easy to add GHC 50 and Garmin patented Shadow Drive at any time if not initially included
- Add optional Autopilot remote for control anywhere on your boat

## REACTOR™ 40 KICKER AUTOPILOT

REACTOR™ 40 KICKER AUTOPILOT WITH GHC™ 50 DISPLAY Part no: 010-02794-09  
REACTOR™ 40 KICKER AUTOPILOT WITHOUT GHC™ 50 DISPLAY Part no: 010-00705-95

The Reactor 40 kicker autopilot is specially designed for boats with small gasoline outboard motors up to 20 horsepower. Whether you're going for salmon, trout, walleye or some other species, your Reactor 40 kicker autopilot can help you maintain heading hold and route to keep you on course — even against wind, waves or heavy current. It includes a convenient floating handheld remote control with bright, sunlight-readable display. The Reactor 40 kicker autopilot makes it easy to fine-tune your autopilot throttle setting with the touch of a button and to quickly drop to idle speed when netting a fish. Enjoy easy integration with our included GHC™ 50 display, compatible Garmin chartplotters or NMEA 2000® network-compatible GPS system for a seamless onboard setup.



### ADDITIONAL SERIES FEATURES

- Specially designed for boats with small gasoline outboard motors up to 20 horsepower
- Helps maintain heading hold and route to keep you on course — even against wind, waves or heavy current
- Includes convenient floating handheld remote control with a bright, sunlight-readable display
- Easily fine-tune autopilot throttle setting with the touch of a button to quickly drop to idle speed when netting a fish
- Easy to install and integrate with our included GHC 50 display, compatible Garmin chartplotters or NMEA 2000 network-compatible GPS system



# COMMUNICATIONS



# VHF

## CORTEX® V1 MARINE RADIO

Part no: 010-02814-20

A revolution in marine communication that will change your VHF experience forever. With an intuitive touchscreen handset engineered for durability, the Cortex V1 is a communications hub that integrates strong, clear audio with the power of AIS collision avoidance — plus remote systems monitoring and control from on board or ashore.

- With up to 85 dBA of crystal-clear audio power, the Cortex V1 system delivers superior sound quality.
- The included Cortex H1 handset offers easy one-hand operation with touchscreen, click-wheel and select keys.
- A built-in SOTDMA AIS transponder proactively warns you of certain collision threats with voiced alerts.
- Quickly initiate digital selective calling direct calls by tapping the AIS boat symbol on the handset's touchscreen.
- Cortex apps let you monitor boat systems, receive alerts and remotely control devices from your compatible smartphone.
- NMEA 2000® networking allows you to view Cortex data on your connected MFDs and chartplotters.



## VHF, AIS AND MONITORING

Cortex V1 is an advanced multi-station VHF radio with remote monitoring and control. The Cortex V1 system includes a Cortex M1 hub and Cortex H1 tethered handset. Connect additional Cortex handsets (sold separately) for even more freedom and control on board.

## ONE-TOUCH DSC

Cortex lets you initiate DSC direct calls with other vessels by simply tapping the vessel icon on your handset. Initiate VHF calls to friends from the saved favorites list, nearby vessel directory list or quickly hail another vessel from the collision avoidance situation screen when every second counts.

## ANCHOR WATCH

Whether you're onboard or ashore, you can know for sure your boat is securely anchored. Cortex smartAIS accurately tracks boat movement, heading and bow position, alerting you if your anchor drags.

## COLLISION AVOIDANCE

Cortex smartAIS continuously monitors AIS information from other boats and calculates crossing situations, generates collision alarms and provides easy-to-understand avoidance cues. Data from its built-in heading sensor is also broadcast, so other vessels can clearly identify which direction your boat is moving.

## NEVER MISS A WORD

The Cortex system's cutting-edge SquelchEQ control is constantly adjusting for optimum listening performance, while its unique omni watch actively listens to all VHF frequency channels simultaneously and records each active channel for a playback period. With Cortex, you'll truly never miss a word.

## VHF VOICE FLEXIBILITY

Connect up to 5 portable and power-tethered style Cortex handsets wirelessly via Wi-Fi® link to the Cortex M1 hub. Keep a portable handset with you for continual VHF communications access from anywhere on your boat.

## VHF 115 MARINE RADIO

Part no: 010-02096-00



Essential fixed-mount VHF marine radio with 25-watt transmit power and built-in GPS. Standard Class D digital selective calling (DSC) and easy plug-and-play installation to compatible chartplotters and MFDs via the NMEA 2000® network.

## VHF 315 MARINE RADIO

Part no: 010-02047-00



Modular black box VHF marine radio with built-in GPS receiver<sup>1</sup>. Includes GHS II Wired VHF Handset and active speaker to use as an intercom between up to 3 stations. Connect a 30-watt capable hailer for two-way broadcast and listening. Easy plug-and-play installation to compatible chartplotters and MFDs the NMEA 2000® network.

## VHF 215 MARINE RADIO

Part no: 010-02097-00



Fixed-mount VHF marine radio with relocatable fist microphone handset. Compatible with GHS II Wired VHF Handset. It has 25-watt transmit power with built-in GPS and standard Class D DSC, and easy plug-and-play installation to compatible chartplotters and MFDs via the NMEA 2000® network.

## GHS™ 11 WIRED VHF HANDSET

Part no: 010-01759-00



Full-function wired VHF Handset compatible with VHF 215, VHF 215 Garmin AIS and VHF 315. Clear 2" display, mounting flexibility using the 32' extension cable from the VHF marine radio and convenient 1' to nearly 5' coiled cable to the handset.

## VHF 215 AIS MARINE RADIO

Part no: 010-01654-00



Fixed-mount VHF marine radio with built-in Class B CSTDMA AIS receiver. Easy plug-and-play installation to compatible chartplotters and MFDs to display AIS targets via the NMEA 2000® network. Flexible mounting with relocatable fist microphone handset and compatible with GHS II Wired VHF Handset.

## THE LINEUP

	VHF 115 010-02096-00	VHF 215 010-02097-00	VHF 215 AIS 010-02098-00	VHF 315 010-02047-00	Cortex V1 010-02814-20
Display	2.5"	3.2"	3.2"	2"	4" color touch
Intercom	•	Yes (requires GHS 11i)	Yes (requires GHS 11i)	Yes (up to 3 stations)	Yes (one way)
Hailer & Horn	•	Yes	Yes	Yes	Yes
Built-in AIS	•	•	Class B CSTDMA	•	Class B SOTDMA
Compatible Handsets	•	GHS 11i (additional)	GHS 11i (additional)	GHS 11i (additional)	Cortex H1P and H1P (up to 5 direct to Cortex WiFi®)
Channel Scanning	Yes	Yes	Yes	Yes	Yes
Watch	Dual/Tri	Dual/Tri	Dual/Tri	Dual/Tri	Omni
Record/Playback	•	•	•	•	Yes (all channels)
Off-boat Monitoring	•	•	•	•	Yes

<sup>1</sup>VHF 315 requires external antenna (sold separately)

# AIS

## CORTEX® M1 SMARTAIS

Part no: 010-02815-20

The Cortex M1 hub combines advanced collision avoidance technology with proactive alerting plus remote monitoring and control of onboard systems from your compatible smartphone.

- A high-speed Class B SOTDMA smartAIS transponder transmits your boat's location and heading and proactively warns of certain collision threats.
- Features Anchor Watch for anchor drag alerts and receives man overboard beacon transmissions.
- Cortex M1 is VHF-ready. Simply add a Cortex handset (sold separately) for full VHF radio capability.
- Cortex apps let you monitor boat systems, receive alerts and remotely control devices from your compatible smartphone.
- A GPIO port and supplied cable allow you to monitor bilge pumps, security sensors, shore power and more.
- NMEA 2000® networking allows you to view Cortex data on your connected MFDs and chartplotters.



### ANCHOR WATCH

Using actual anchor position from the bow and the Cortex built-in heading sensor, smartAIS tracks boat movement and sounds an alarm if the anchor drags or if there is a change in wind speed, direction or water depth. While on your boat, get alerts on your compatible mobile device via the Cortex Onboard™ app – or via the Cortex Monitor™ app when you're ashore.

### REMOTE MONITORING AND CONTROL

Check boat status, receive alerts and control devices with Cortex remote monitoring access using the Cortex Monitor app. Directly connect up to 5 external sensors to your system for added monitoring capability.

### COLLISION AVOIDANCE

Cortex M1 is a full Class B SOTDMA transceiver combining GPS, AIS and heading data with smart logic to proactively warn you of certain collision risks with alarms or voice-annunciated alerts that escalate until acknowledged. AIS vessel information (name, bearing and relative position) is continuously provided using AIS information broadcast from other boats.

### CORTEX ONBOARD APP

While you're on your boat, the Cortex Onboard app can serve as your primary interface with your Cortex M1 hub, allowing you to monitor boat status, receive alerts, view instrument data and display AIS screens on your compatible smart device.

### MAN OVERBOARD

Cortex smartAIS continuously watches for man overboard (MOB) activations, sounding an alarm when it detects one. MOB can be manually activated via the Cortex Onboard app or automatically from an AIS MOB beacon – which launches a track-back mode for quicker retrieval.

### NETWORK CONNECTIVITY

Cortex can receive and broadcast information over NMEA 0183 and NMEA 2000® networks, making it compatible with all modern chartplotters and multifunction displays.

### CLASS B SOTDMA

Class B SOTDMA AIS is self-organizing and offers increased benefits over regular Class B CSTDMA. Increased transmission power guaranteed time slot allocation helps ensure your position report is received by other vessels. Transmission rate is also increased when your vessel is traveling at increased speed.

### AIS ON YOUR CHART PLOTTER

Cortex® M1 and AIS 800 AIS transceivers feature NMEA 2000®/0183 connectivity for easy integration with compatible chartplotters and multifunction displays. See AIS target vessels in range on your chartplotter.

## GARMIN AIS™ 800

Part no: 010-02087-00

Increase your situational awareness and confidence on the water with the Garmin AIS 800 transceiver. Featuring Class-B SOTDMA with 5 watts of transmit power, AIS 800 broadcasts position reports faster with increased speed over regular Class-B CSTDMA. Transmit your vessel information to other vessels' AIS receivers in your area so you can be seen. Receive AIS target data from other vessels and plot those on a NMEA 2000® networked chartplotter or multifunction display. An internal VHF antenna splitter allows the VHF and AIS to share a single antenna. A built-in GPS ensures your broadcasted position reports are accurate for other vessels.

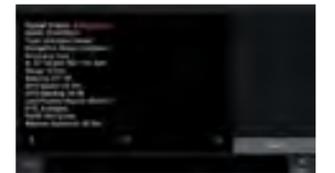
- Easy-to-use, reliable communication transmits your vessel information to other AIS receivers in your area while receiving AIS target data
- 5 watts of transmit power with Class B SOTDMA provides faster positioning reporting with increased speed
- Built-in GPS with connector for optional external antenna
- NMEA 2000® connectivity for easy integration with compatible chartplotters and multifunction displays
- Internal VHF antenna splitter allows VHF and AIS to share a single antenna

### COLLISION WARNINGS



Potential risks are displayed, helping to minimize the risk of collision.

### IDENTIFICATION



Sends detailed vessel data, allowing easy identification.

### CLEAR OVERVIEW



Shows you the surroundings and the vessels around your boat.

### SOCIAL SEAMANSHIP



Spot your friends quickly and enjoy direct ship-to-ship communication.



# SATELLITE TV DOME POWERED BY KVH®



With 30% greater reception than other systems, you'll enjoy satellite TV reception where few others can provide it. Our GTV5 and GTV6 satellite TV antenna, powered by KVH and available as part of a Garmin bridge package, offers outstanding high-performance tracking and reception as well as compatibility with DIRECTV U.S., DISH Network, Bell TV, Sky Mexico, Sky Italia, Sky U.K. and circular and linear Ku-band services worldwide. This rugged system is ideal for sportfishing boats or boats venturing offshore or to the islands.



POWERED BY KVH

SATELLITE TV ANTENNA

WITH 30% GREATER RECEPTION THAN OTHER SYSTEMS

SUPPORTS MULTIPLE RECEIVER INSTALLATIONS



## ADDITIONAL SERIES FEATURES

- GTV6 Satellite TV Dome Ultra high-efficiency, 24" (60 cm) diameter antenna features proprietary KVH® RingFire™ technology for stronger signals, wider geographic coverage and better reception
- 18" (45 cm) diameter GTV5 Satellite TV Dome features proprietary KVH® RingFire™ technology for stronger signals, wider geographic coverage and better reception
- Supports DIRECTV® U.S., DISH Network®, Bell TV, Sky Mexico, Sky Italia, Sky U.K. and circular and linear Ku-band services worldwide
- Supports multiple receiver installations
- Low elevation angle for better tracking in northern latitudes
- Linear Universal Quad LNB configuration offers optional built-in GPS and autoskew
- The TV-Hub, a streamlined IP-enabled antenna control unit, enables automatic satellite switching
- User-friendly interface provides a wizard for easy installation and setup as well as system information at your fingertips from any smartphone, tablet, smart TV or computer



# INSTRUMENTS



## GNX™ 130 AND 120



GNX™ 130 Part no: 010-01396-00



GNX™ 120 Part no: 010-01395-00

Designed for serious sailors who demand quality, precision and total integration. This high-precision, glass-bonded 10" or 7" large-format instrument creates a beautiful "glass mast" display with superior readability in all conditions, day and night, with no fogging.



HIGH-PRECISION GLASS-BONDED BACKLIT LCD DISPLAY AVOIDS FOGGING



BOLD 2.75" (70 MM) DIGITS ARE THE LARGEST DIGITS IN CLASS



DISPLAYS MORE THAN 50 MARINE AND BOAT PARAMETERS



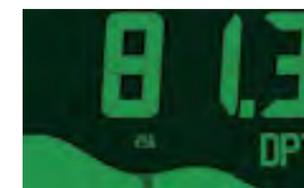
ALLOWS SEAMLESS SHARING OF SAILING DATA BETWEEN GARMIN DEVICES



Boat speed and VMG



Heading



Depth



True wind angle and true wind speed

### GNX™ KEYPAD

Part no: 010-12255-00



Control the GNX™ 120 or GNX™ 130 from a distance with this optional push-button keypad interface that can be mounted near the helm. You can preset 4 buttons to dedicated configurations and adjust the background lighting of all displays with the touch of a button.

### GNX™ 120 MAST BRACKETS

Part no: 010-12236-00 (2 units), 010-12236-01 (3 units), 010-12236-02 (4 units)



Flat mount the GNX 120 display for a beautiful glass mast look using our carbon fiber mast brackets. Choose from three mast bracket options — 2, 3 or 4 units.

# INSTRUMENTS

## GNX™ WIND

Part no: 010-01142-30



A superb addition for all sailboats, GNX Wind features a high-visibility, glass-bonded backlit LCD display with customizable colors. It shows two data fields and a digital wind rose simultaneously to display true and apparent wind data, steering guidance, boat speed and more. It also offers 15 important marine parameters for wind, speed, navigation, and customizable profiles and other configurations.

## GMI™ 20

Part no: 010-01140-00



The GMI 20 has a 4" color screen that displays depth, speed, wind, engine information, and more than 100 marine and vessel specific parameters based on your preference. Its glass-bonded finish lens resists fogging and increases contrast. Other features include a dedicated race timer that counts both down and up with an internal beeper.

## GNX™ 21 AND 20

GNX 20 Part no: 010-01142-00 / GNX 21 Part no: 010-01142-10



Perfectly designed marine instruments for both sailboats and power vessels, they're easy to read, clearly showing depth, speed, wind, and 50 additional marine and vessel parameters. Preset auto-scroll function automatically cycles between screens.

## TD 50

Part no: 010-02139-10



The TD 50 touchscreen display is a compact 5" edge-to-edge glass display offering supplementary control, switching and instrumentation for onboard marine systems. It's compatible with the Garmin Marine Network and NMEA 2000®, as well as OneHelm™ and EmpirBus™ systems. Boaters can use the TD 50 to view and control engine and vessel data and adjust settings for lights, air conditioning, refrigeration, entertainment systems, security sensors, autopilots or any other information on the network.

# WIND SYSTEMS



Garmin gWind™ sensors feature a 3-bladed propeller and twin-fin design for accurate true wind speed (TWS) in lighter air and stable true wind angle (TWA).

The GND™ 10 black box interface (part no. 010-01227-00) seamlessly integrates Nexus instruments and sensors with the Garmin family. It converts data between the Nexus Network and NMEA 2000® to provide compatibility between Nexus and Garmin products, including gWind, gWind™ Wireless and gWind™ Race transducers. Simple plug-and-play installation between Nexus and NMEA 2000, with USB connectivity, eliminates the need for user setup and system configuration.

## GWIND™ TRANSDUCER

Part no: 010-01227-00



This transducer features twin-fin technology with 3-bladed propeller for accurate TWS in lighter air while the twin-fin design gives a stable TWA. It includes a GND 10 black box.

## GWIND WIRELESS 2 TRANSDUCER

Part no: 010-01616-00



An easy-to-install solution that eliminates running wires through masts up to 50'. Accurate wind signals are sent via an ANT® connection directly to a GNX Wind instrument or compatible Garmin GPSMAP® 8400/8600 series or GPSMAP® 7400/7600 series chartplotters. A solar panel mounted on the transducer arm provides power to the internal solar-charged battery that lasts 3 years and is easily replaced.

## GWIND RACE TRANSDUCER

Part no: 010-01228-00



Designed for racing sailboats, the gWind Race features a 3.3' (1 meter) straight pole that raises the transducer above the mast to remove turbulence errors. It includes a GND 10 black box.

# INSTRUMENT PACKS

## GNX™ WIRELESS WIND PACK

Part no.: 010-01616-10

GNX Wind and gWind Wireless 2.



## GNX™ WIRELESS SAIL PACK 52

Part no.: 010-01616-40

GNX Wind, GNX 20, gWind Wireless 2 and DST810 (depth, speed and temperature).



## GNX™ WIRELESS SAIL PACK 43

Part no.: 010-01616-30

GNX Wind, GNX 20, gWind Wireless 2, GST 43 (speed and temperature), GDT 43 (depth and temperature) and NMEA 2000® adapters.



## GNX WIRED SAIL PACK 43

Part no.: 010-01248-60

GNX Wind, GNX 20, gWind, GST 43 (speed and temperature), GDT 43 (depth and temperature) and NMEA 2000 adapters.



## GNX WIRED SAIL PACK 52

Part no.: 010-01248-70

GNX Wind, GNX 20, gWind, GND 10 and DST810 (depth, speed and temperature).



## GMI WIRED START PACK 52

Part no.: 010-01248-80

GMI 20, gWind, GND 10 and DST810 (depth, speed and temperature).



## SAILASSIST

To improve your sailing experience, GPSMAP series chartplotters include special preloaded sailing features such as laylines, enhanced wind rose, heading and course-over-ground lines, data filtering, north-up and course-up chart combos, heel angle, true wind data fields, tide/current/time slider, polars and more. For sail racing, there are prerace guidance, synchronized race timer, virtual starting line, time to burn and lay line data fields<sup>1</sup>.

### LAYLINES



View laylines and other critical data right on your chartplotter screen.

### PRERACE GUIDANCE



Displays high-resolution depth range shading for up to 10 depth ranges, so you can view your designated target depth.

### WIND GRAPHS



Clear graphs of true wind direction, apparent wind angle, true wind speed and apparent wind speed.

### POLAR TABLE DATA



Support for polar table file handling enables your Garmin chartplotter to calculate the optimal wind angle for your sailboat to achieve its highest speed.

### NORTH-UP / COURSE-UP COMBO



Set up a dual navigation chart combo showing north-up and course-up orientations. This simultaneous viewing enhances awareness for course direction and a broader positional location.

### SAILING AUTO RESPONSE



Automatically adjusts the response setting, based on the sea and wind conditions. Response is lowered in calm conditions to prevent an overactive rudder — and it's raised in rough conditions to respond to wind and wave disturbances.



# FISHFINDERS



## STRIKER™ VIVID SERIES



010-02550-00 4cv + transducer



010-02551-00 5cv + transducer



010-02552-00 7cv + transducer



010-02554-01 9sv + transducer

See fish and structure in colorful detail with the easy-to-use STRIKER™ Vivid series fishfinders. Available in screen sizes ranging from 4" to 9", these devices feature high-contrast color palettes with support for traditional and scanning sonar capabilities<sup>1</sup> to make it easier to see what's beneath the surface. Built-in high sensitivity GPS lets you mark your favorite fishing spots and easily navigate back to them.

### FEATURED — STRIKER PLUS 7SV



BRIGHT, SUNLIGHT-READABLE SCREEN WITH VIVID SCANNING SONAR COLOR PALETTES

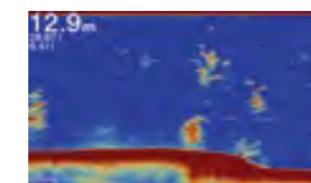
AVAILABLE WITH TRANSDUCER FOR CHIRP TRADITIONAL, CLEARVÜ AND SIDEVÜ SCANNING SONAR

BUILT-IN GPS LETS YOU MARK WAYPOINTS, CREATE ROUTES AND VIEW BOAT'S SPEED

INCLUDES BUILT-IN QUICKDRAW CONTOURS MAPPING



#### CHIRP TRADITIONAL



Crisp, clear CHIRP traditional sonar.

#### CLEARVÜ SCANNING SONAR



See images of what's under your boat.

#### SIDEVÜ SCANNING SONAR



Get incredibly clear images of what's off to either side of your boat.

#### QUICKDRAW CONTOURS MAPPING



Create and store maps as you fish with 1' contours for up to 2 million acres.

### THE LINEUP

	STRIKER 4	STRIKER Plus 4	STRIKER Vivid 4cv	STRIKER Vivid 5cv	STRIKER Vivid 7cv	STRIKER Vivid 7sv	STRIKER Vivid 9sv
	010-01550-00	010-01870-00	010-02550-00	010-02551-00	010-02552-00	010-02553-00	010-02554-01
Built-in GPS	•	•	•	•	•	•	•
Quickdraw Contours		•	•	•	•	•	•
Garmin CHIRP Traditional <sup>1</sup>	•	•	•	•	•	•	•
CHIRP ClearVü <sup>1</sup>			•	•	•	•	•
CHIRP SideVü <sup>1</sup>						•	•
Built-in Wi-Fi <sup>®</sup>					•	•	•
ActiveCaptain <sup>®</sup> App Compatible <sup>1</sup>					•	•	•
Transducer and Mounts Included	•	•	•	•	•	•	•

<sup>1</sup>Additional equipment (sold separately) and device pairing required • <sup>2</sup>Available on STRIKER Cast GPS model • Wi-Fi is a registered trademark of the Wi-Fi Alliance.

# STRIKER™ CAST



Why guess where to find fish? See exactly where they're hiding with the durable STRIKER™ Cast series castable sonars. Just download the STRIKER Cast app, pair your compatible mobile device with the sonar and go fishing in minutes. Cast from shore, dock or watercraft, and reel back in to locate and display fish, wirelessly streaming sonar up to 200' to your smartphone or tablet.

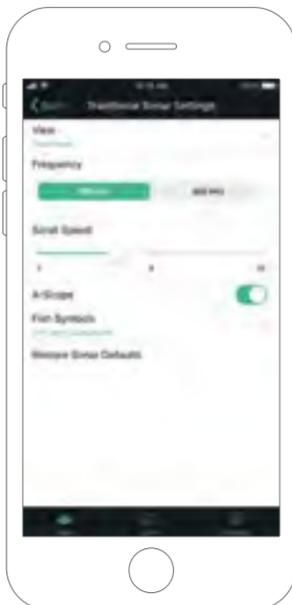
» STREAMS LIVE SONAR
 ⋮
 PAIR WITH COMPATIBLE APPLE® OR ANDROID™ APPS¹
 ⋮
 UP TO 200' SONAR RANGE
 ⋮
 10+ HOURS BATTERY LIFE²
 «

## SCAN FISH BY PHONE



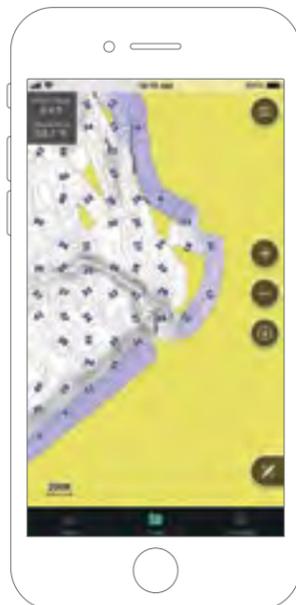
Wirelessly stream sonar to view fish and structure up to 200' in any direction via the STRIKER™ Cast app on your compatible smartphone or tablet.

## SELECTABLE MODES



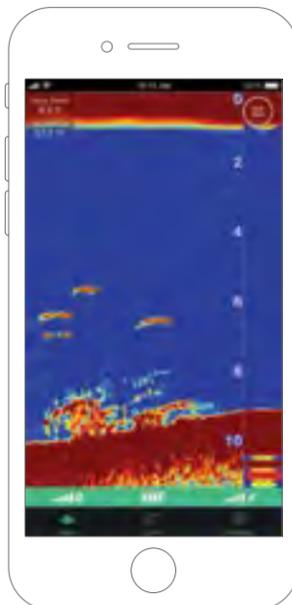
Choose your views from easy-to-interpret traditional 2-D sonar and ice fishing flasher modes, with setting adjustments for gain, range and more.

## QUICKDRAW CONTOURS

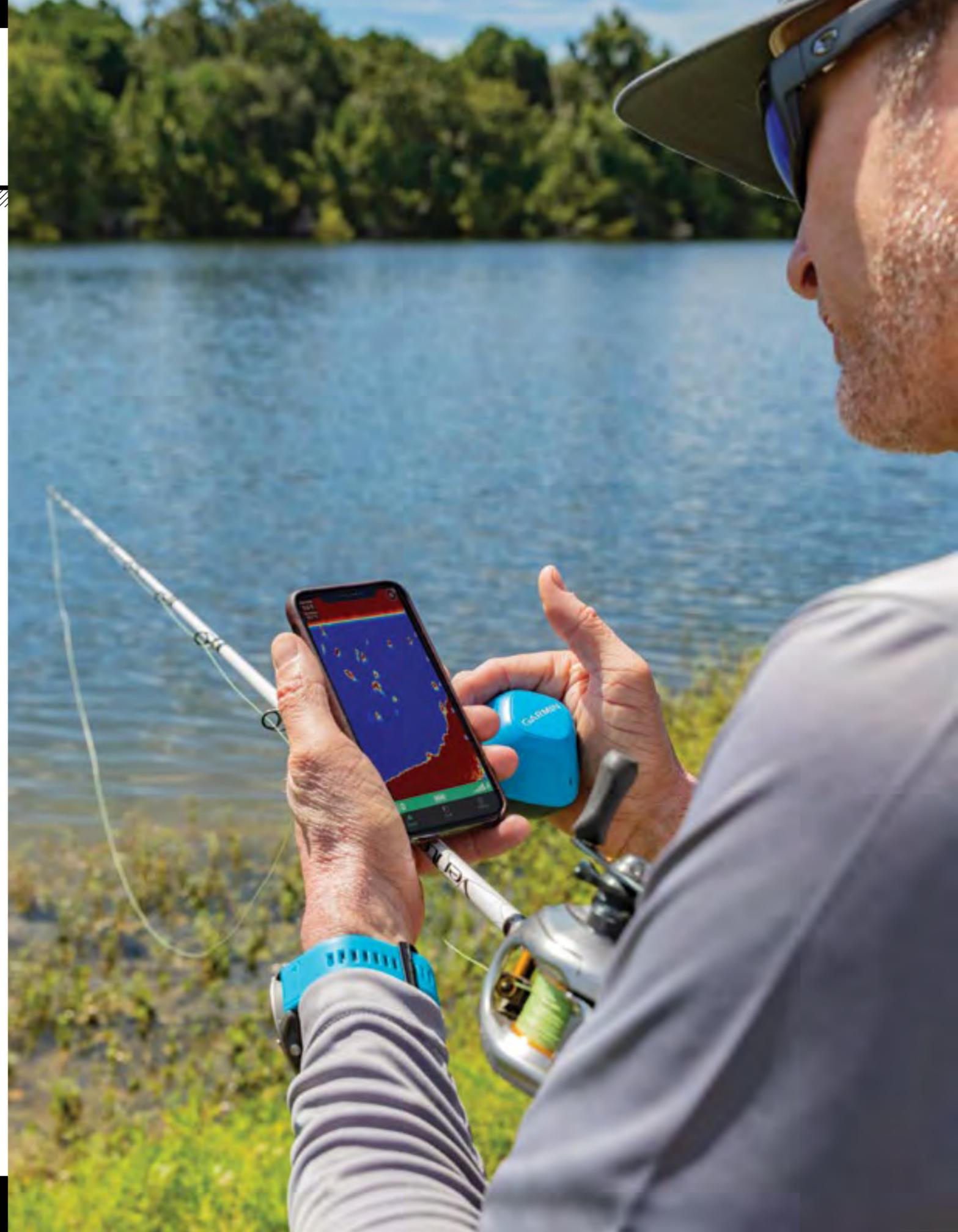


GPS model offers waypoint marking and Quickdraw Contours, letting you create and save your own fishing maps with 1' contours.

## FISH ICONS



Turn on fish icons to view graphic images of fish targets and their depth readings so you'll know exactly where to drop your line.



¹When paired with a compatible smartphone; see [Garmin.com/ble](http://Garmin.com/ble) • ²Battery life may vary depending on usage • Apple is a trademark of Apple Inc., registered in the U.S. and other countries. Android is a trademark of Google LLC.

# CAMERAS AND CAMERA SYSTEMS



# MARINE CAMERAS



Enhance proximity awareness and confidence at the dock with the GC™ 245 surface mount and GC™ 255 flush-mount marine cameras. Use the distance markers (professional calibration required) or guidance lines to help avoid obstacles in the marina. See video feeds in high definition from multiple views, including BirdsEye<sup>1</sup>, FishEye and standard views with low-light capabilities.

>> DISTANCE MARKERS SPECIFIC TO YOUR BOAT<sup>1</sup>
 1080P HIGH RESOLUTION OUTPUT<sup>2</sup>
 GC 245 AVAILABLE IN BLACK OR WHITE; GC 255 AVAILABLE IN STAINLESS STEEL
 SEE CAMERA FEEDS IN FISHEYE, STANDARD, OR BIRDSEYE<sup>1</sup> VIEW
 FULL INTEGRATION ON THE GARMIN MARINE OR GARMIN BLUENET™ NETWORKS
 <<

## GUIDANCE LINES



Set up your own guidance lines for more confidence avoiding obstacles in the marina.

## DISTANCE MARKERS<sup>1</sup>



In tight maneuvering situations, distance markers around the boat provide visual cues to help maintain safe clearance and separation.

## THREE CAMERA VIEWS



Get the right perspective with FishEye and standard views with impressive low-light performance; also available with BirdsEye camera view<sup>1</sup>.

## BIRDSEYE VIEW



Plan for a smooth arrival with docking and maneuvering help from the available BirdsEye camera view (professional calibration required).

## THE LINEUP

	GC 245 Marine Camera 010-02892-10 (white) / 010-02892-11 (black)	GC 255 Marine Camera 010-02892-00
Boat Docking Camera	•	•
Low-light Vision	•	•
Versatile Mounting Options	•	•
Rugged Housing	•	•
Water Rating	IPX7	IPX7
Video Resolution	1920 x 1080p <sup>2</sup>	1920 x 1080p <sup>2</sup>
Pair Multiple Cameras	•	•
Connection to Chartplotter	IP	IP
Hardwired Power	12V/24V	12V/24V

<sup>1</sup>Professional calibration required

<sup>2</sup>1080p resolution available on select chartplotters only

# MARINE CAMERAS



Garmin marine cameras add security and heightened awareness to your vessel. They provide an extra set of eyes to monitor areas above or below decks – even in low light – making them perfect for engine rooms. The small size and rugged weatherproof cases allow you to install them nearly anywhere on your boat.

## GC™ 200 MARINE IP CAMERA

Enjoy added security and awareness on your vessel by using the GC 200 camera to monitor areas above and below deck in clear, real-time HD video. Connect up to 16 cameras on the Garmin Marine Network and share across multiple compatible chartplotters or stream video from up to 4 cameras at a time on a single chartplotter. With built-in infrared night vision (up to 30 meters), monitor your vessel even when in the dark.

>> MONITOR AREAS ABOVE AND BELOW DECK IN REAL TIME
 HD-RESOLUTION IMAGES EVEN IN LOW LIGHT
 STREAM VIDEO FROM UP TO 4 CAMERAS AT A TIME ON A SINGLE COMPATIBLE CHARTPLOTTER
 REVERSE-IMAGE SETTING HELPS WHEN BACKING OUT OF TIGHT LOCATIONS SUCH AS CROWDED MARINAS
 SHARE VIDEO ACROSS MULTIPLE COMPATIBLE CHARTPLOTTERS
 <<

## GC™ 100 WIRELESS MARINE CAMERA

Compact wireless camera streams high-quality video to your compatible chartplotter and any other chartplotter on the same network. Effective in total darkness, it's perfect for the engine room. Easy to install and hardwired for power, the camera is ready to use with one-button setup.

## GC™ 14 MARINE CAMERA

Small and discreet, this camera delivers excellent quality images. Use it in multiple areas above or below decks, and view on one chartplotter or across multiple networked compatible chartplotters. It can help you back out of a crowded marina or keep an eye on your dark engine room.

## THE LINEUP

	GC 14 Marine Camera 010-02667-00	GC 200 Marine IP Camera 010-02164-00	GC 100 Marine Camera 010-01865-30
Boat Monitoring Camera	•	•	•
Low-light Vision	•	•	•
Versatile Mounting Options	•	•	•
Rugged Housing	•	•	•
Water Rating	IPX7	IPX7	IPX7
Video Resolution	976(H) x 582(V)	Up to 1920 x 1080P	720p
One-button Start-up	•	•	•
Pair Multiple Cameras	•	•	•
Connection to Chartplotter	Analog	IP	Wi-Fi®
Hardwired Power	12V	12V and POE	12V

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

# SURROUND VIEW SYSTEM



In tight maneuvering situations, the Garmin Surround View Camera System is a video guidance breakthrough. It's a fully integrated system of cameras that offers live bird's-eye view video monitoring for full 360-degree visibility around the boat from the helm. The video feed from the discreet, OEM factory-installed six-camera array seamlessly integrates with compatible Garmin chartplotters or MFD helm displays. The cameras also support situational awareness augmented reality features such as distance markers (similar to automotive backup camera viewing) and a visual bumper that helps the captain see when docks or other objects breach preset barrier limits around the boat. Through-hull installation at the factory offers secure fit and calibration for reliable, low-maintenance operation.

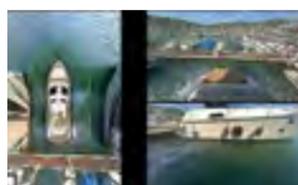
- LIVE BIRD'S-EYE  
VIEW VIDEO**
- FULL 360-DEGREE  
WRAPAROUND VIEW**
- 6-CAMERA  
ARRAY ON BOARD**
- SLEEK IN-HULL  
OEM INSTALLATION**
- AUDIBLE PROXIMITY  
BEEPER**

## SEAMLESS SITUATIONAL AWARENESS



The 360-degree video feed integrates with compatible Garmin chartplotters or MFD helm displays. Each camera view can also be monitored individually. Object detection proximity beeper provides an audible beep from your MFD to indicate how close objects are to the boat.

## ACTIVE VISUAL BUMPER



A visual bumper feature helps the captain see when docks, piers or other objects breach preset barrier limits around the boat.

## ACTIVE DISTANCE MARKERS



In tight maneuvering situations, distance markers around the boat provide visual cues to help maintain safe clearance and separation.

## ENGINEERED FOR LOW MAINTENANCE



Thru-hull OEM installation offers secure fit and calibration of the Surround View Camera System. For easy maintenance, any of the cameras can be replaced externally.



# WEARABLES AND HANDHELDS



# QUATIX® 7 SERIES



Plot your paradise on the water and beyond with quatix 7, the multisport GPS marine smartwatch that has all the features you need on your boat and the ones you want off it. Your quatix 7 provides comprehensive connectivity with compatible Garmin chartplotters, Force® trolling motors and other devices<sup>1</sup> to offer autopilot control, Fusion Audio entertainment system control, sail racing assistance, integrated tide data on the watch face and much more. The watch comes in Classic, Solar and Pro editions — all of which let you enjoy full control of your boat from your wrist. All quatix 7 series watches feature an intuitive touchscreen interface, and the Solar and Pro editions add an ultrabright, high-resolution AMOLED color display.

- >> COMPREHENSIVE BOAT CONNECTIVITY
- COMPATIBLE WITH SELECT GARMIN DEVICES
- 24/7 HEALTH MONITORING AND SMART NOTIFICATIONS<sup>1</sup>
- USE TRADITIONAL BUTTON CONTROLS OR TOUCHSCREEN INTERFACE
- BUILT-IN WAKE SPORTS ACTIVITY PROFILES FOR WATER SKIING, WAKEBOARDING, WAKE SURFING AND TUBING
 <<

**AUTOPILOT CONTROL<sup>2</sup>**

Access the autopilot app for control from your wrist: change heading, engage pattern steering, follow a GPS route and more.

**DATA STREAMING**

Wirelessly connect with compatible devices to stream data — water depth, engine RPM, wind, custom inputs and more — directly onto your wrist.

**MARINE CHARTS**

Never lose sight of where you are. Your quatix watch can support optional BlueChart® g3 coastal charts and LakeVü™ inland maps.

**SPORTS AND ADVENTURES**

Built-in activity profiles let you track your pursuits on water and land, including golf, hiking, paddleboarding, kayaking and more.

**MEDIA CONTROL**

Play your favorite tunes and control your onboard entertainment system with the built-in Fusion Audio app.

## THE LINEUP

	quatix 7 Standard 010-02540-60	quatix 7 Pro 010-02803-80	quatix 7X Solar 010-02541-60
<b>Bezel and Band</b>	Stainless steel with blue silicone band	Titanium with silicon band	Titanium with titanium band
<b>Lens Material</b>	Corning® Gorilla® Glass DX	Sapphire crystal	Power Glass™ Solar-charging Lens
<b>Display Type</b>	MIP	AMOLED	MIP
<b>Connectivity</b>	BLUETOOTH®, ANT+®, Wi-Fi®	BLUETOOTH®, ANT+®, Wi-Fi®	BLUETOOTH®, ANT+®, Wi-Fi®
<b>Battery Life</b>	Up to 18 days in smartwatch mode; up to 57 hours in GPS mode	Up to 16 days in smartwatch mode; up to 42 hours in GPS mode	Up to 28 days in smartwatch mode, with up to an additional 9 days when solar charging; up to 89 hours in GPS mode, with up to an additional 33 hours when solar charging <sup>3</sup>
<b>Water Rating</b>	10 ATM	10 ATM	10 ATM
<b>Built-in LED Flashlight</b>	No	Yes	Yes

# MARQ® CAPTAIN



Whether you own the cup or are inspired by those who do, MARQ Captain shows your passion for life at sea. It is the modern tool watch with advanced nautical and smart features that one simply won't find in a traditional timepiece. Featuring a dual-color nautical design, It's built from grade-5 titanium to be lighter and stronger, with a stunning new 1.2" AMOLED touchscreen display and domed sapphire lens. Set your preferred wind speed and see a forecast on your watch face, so you know what day you should take to the high seas. This is the watch for those who live life at the helm.

- >> ENDURING MATERIALS
- AUTOPILOT CONTROL
- PAIRS WITH SELECT GARMIN CHARTPLOTTERS
- REGATTA TIMER
- TACK ASSIST
- SAIL EXPEDITION
 <<



<sup>1</sup>Compatible marine products: GPSMAP® 7x2/9x2/12x2 Plus, GPSMAP® 7x3/9x3/12x3/16x3, GPSMAP® 10x2/12x2, GPSMAP® 74/7600, GPSMAP® 84/8600, GPSMAP® 9000, GHC™ 20, GHC™ 50, GNX™ Wind, GNT™ 10 • <sup>2</sup>When paired with a compatible smartphone, see Garmin.com/ble • <sup>3</sup>Assumes continuous use for entire period in 50,000 lux conditions

# HANDHELDS

# HANDHELDS

## GPSMAP® 73 AND GPSMAP® 79 SERIES

Boaters and watersport enthusiasts everywhere swear by GPSMAP 73, 79s and 79sc handhelds. They float! The 79 series features bright 2.6" LCD color displays with built-in worldwide basemaps and a special MOB (man overboard) button. 79sc model also comes with preloaded U.S. coastal charts. The GPS 73 handheld includes SailAssist features, including virtual starting line, heading line, countdown timers and tack assist.



GPSMAP 73      GPSMAP 79S      GPSMAP 79SC

## GPSMAP® 276CX

All-terrain navigator with advanced GPS and GLONASS reception tracks your position in challenging environments. It has a large, sunlight-readable 5" screen plus built-in barometric altimeter and 3-axis compass. The GPSMAP 276CX also comes preloaded with a worldwide basemap and free 1-year BirdsEye Satellite Imagery subscription. Advanced mapping, connectivity and flexible mounting options are available; and it's water-rated to IPX7.



## GPSMAP® 86 SERIES HANDHELDS

Cast off confidently. These premium, floating navigators have a sunlight-readable 3" color display and preloaded BlueChart® g3 coastal charts. Wireless connectivity lets you stream boat data from compatible chartplotters and instruments — plus you can use them as a remote control for your Garmin autopilot and Fusion® marine audio products. The GPSMAP 86i and GPSMAP 86sci versions feature inReach® satellite technology<sup>1</sup> for two-way messaging, interactive SOS and off-grid peace of mind.



GPSMAP 86s      GPSMAP 86sc      GPSMAP 86i      GPSMAP 86sci



## THE LINEUP

	GPSMAP 73 010-01504-00	GPSMAP 79s 010-2635-00	GPSMAP 79sc 010-2635-02	GPSMAP 86s 010-02235-00	GPSMAP 86sc 010-00864-02	GPSMAP 86i 010-02236-00	GPSMAP 86sci 010-02235-00	GPSMAP 276CX 010-01607-00
Easy-to-use Handheld	•	•	•	•	•	•	•	•
Floats	•	•	•	•	•	•	•	•
SailAssist	•							
Back-lit Buttons	•	•	•	•	•	•	•	•
Color Screen		•	•	•	•	•	•	•
Worldwide Basemap		•	Built-in BlueChart g3	•	Built-in BlueChart g3	•	Built-in BlueChart g3	•
Ability to Add Maps		•	•	•	•	•	•	•
Waypoints/Favs/Locations	1,000	2,000	2,000	10,000	10,000	10,000	10,000	10,000
Routes	50	250	250	250	250	250	250	250
inReach® Satellite Technology <sup>1</sup>						•	•	
Memory/History		8 GB	8 GB	16 GB	16 GB	16 GB	16 GB	8 GB
Battery Life	+18 hrs	up to 19 hrs	up to 19 hrs	up to 35 hrs	up to 35 hrs	up to 35 hrs	up to 35 hrs	up to 16 hours (lithium-ion)
Compass		Tilt-compensated 3-axis	Tilt-compensated 3-axis	Tilt-compensated 3-axis	Tilt-compensated 3-axis	Tilt-compensated 3-axis	Tilt-compensated 3-axis	Tilt-compensated 3-axis
Barometric Altimeter		•	•	•	•	•	•	•

## INREACH® MESSENGER

Providing global two-way messaging and interactive SOS, the inReach Messenger satellite communicator keeps you connected with friends and family even when you're out of cell coverage<sup>1</sup>. Texting and group messaging is easy when using the Garmin Messenger™ app. Or send/receive messages by using compatible Garmin handhelds, wearables or other devices.



## INREACH® MESSENGER PLUS

Tell them you miss them. Show them the view. Share the experience. The inReach Messenger Plus SOS satellite communicator<sup>1</sup> lets you exchange text, photo and voice messages<sup>2</sup> when your adventure takes you beyond cellular range. Should the need arise, trigger an SOS message with GPS coordinates to Garmin Response™, a 24/7-staffed international response coordination center for help in an emergency.



## INREACH® MINI 2 MARINE BUNDLE

The rugged, compact inReach Mini 2 Marine bundle gives you interactive SOS, two-way messaging and basic navigation via the global Iridium® network<sup>1</sup>. The screw down mount, 12-volt power cable and wireless connectivity to compatible chartplotters let you add peace of mind to your adventures without taking up space on your helm.



<sup>1</sup>Active satellite subscription required. Some jurisdictions regulate or prohibit the use of satellite communications devices. It is your responsibility to know and follow all applicable laws in the jurisdictions where the device is intended to be used. Other Garmin maps not compatible with this device.

<sup>2</sup>Photo and voice messaging requires use of the Garmin Messenger app on your compatible smartphone.

# ACCESSORIES



# ANTENNAS AND SENSORS

## GXM™ 54 SIRIUSXM® WEATHER AND RADIO ANTENNA

010-02277-00 (white) and 010-02277-10 (black)



Gain added awareness and confidence on the water with current weather conditions and forecasts<sup>1</sup> delivered straight to your Garmin chartplotter. Enjoy high-quality entertainment with more than 150 channels of SiriusXM satellite radio<sup>1</sup>. With SiriusXM, you'll also get the Fish Mapping™ feature for suggested potential hot spots based on concentrations of popular species.

## STEADYCAST™ HEADING SENSOR

Part no: 010-11417-10



SteadyCast heading sensor is a simple, easy-to-install solution that provides fast calibration and premium heading accuracy. It aligns your boat bow to its actual orientation so you know where you are casting according to your chartplotter screen. It's accurate even at low speed and effective in rough water.

## 9-AXIS HEADING SENSOR

Part no: 010-11417-20



Our premium solution for exceptional heading accuracy allows for MARPA tracking and improves the radar overlay experience. With heading output at 10 Hz and accuracy of plus or minus 2 degrees, it ensures your chart orientation and boat heading line match up with reality, even at lower speeds. Your heading information will remain accurate, even in rough sea conditions where your bow is pitching and rolling or — in sailboat applications — when heeled over. The 9-axis MEMS technology allows installation in nearly any orientation located away from magnetic interference. It's built to withstand bilge environments.

## GTV5 AND GTV6 SATELLITE TV DOMES POWERED BY KVH®

Part no: GTV5 | 010-02123-00 and GTV6 | 010-02124-00



Enjoy satellite TV reception where few others can provide it. Our 18 GTV5 and ultra high-efficiency, 24" GTV6 satellite TV antennas are powered by KVH and available as part of a Garmin bridge package. They offer outstanding high-performance tracking and reception as well as compatibility with DIRECTV U.S., DISH Network, Bell TV, Sky Mexico, Sky Italia, Sky U.K., and circular and linear Ku-band services worldwide.

## MSC™ 10 MARINE SATELLITE COMPASS

Part no: 010-02407-00 (white) and 010-02407-10 (black)



With multi-band GNSS and a fully integrated attitude and heading reference system this satellite compass ensures a smooth and accurate GPS-derived heading and position on the water. It will also deliver precise pitch, roll and heave information — even in rough seas — to a compatible Garmin chartplotter via the NMEA 2000 network.

## GPS 24XD RECEIVER

Part no: 010-02316-00 (NMEA 0183) | 010-02316-10 (NMEA 2000 - white) | 010-02316-20 (NMEA 2000 - black)



Explore coastal waters with the GPS 24xd position receiver and antenna. Get precise location to within 1 meter with dual-frequency band GPS and heading accuracy even at slow speeds with magnetic heading sensors. System-compatible antenna versions are available for both NMEA 2000® and NMEA 0183.

## GNA 10 JOG LEVER ADAPTER

Part no: 010-13007-00



Use the GNA 10 to connect a jog lever to Reactor™ 40 autopilots on displacement hull work boats or trawlers. Adjust heading hold with the jog lever, or access power steering mode to move the rudder without autopilot guidance.

# ACCESSORIES

## GHC™ 50 CONTROL UNIT

Part no: 010-02731-00



Control your autopilot with up to 3 GHC 50 autopilot helm controller units. Compatible with all Garmin autopilots, for both motor- and sailboats.

## GARMIN USB CARD READER

Part no: 010-02251-10



Save space on your helm with the compact, water-resistant SD™ card reader. It holds two full-size SD cards for quick access to charts, software updates and ActiveCaptain® data. Featuring a 2"x 2" footprint, flush mounting and USB connection to the back of your chartplotter, this card reader easily integrates into a crowded dash or elsewhere at the helm.

## APK™ 10 AUTOPILOT KEYPAD

Part no: Horizontal 010-03197-00 Vertical 010-03197-01



Get precise control of your autopilot in all sea conditions with this easy-to-use tactile control panel accessory. It works with your Reactor™ 40 autopilot and GHC™ 50 autopilot instrument to allow simple, intuitive knob and button activation, heading changes and more.

## GRF™ 10 RUDDER SENSOR

Part no: 010-11829-00



Pair this GRF 10 rudder feedback sensor with your autopilot to provide rudder position feedback to detect and avoid rudder stops.

## GRID™ 20 REMOTE INPUT DEVICE

art no: 010-02011-00 (Portrait), 010-02011-01 (Landscape)



The easy-to-use remote input device provides access and control of your entire Garmin marine system. It features a 360-degree joystick with a rotary knob and push-to-select button for easy chartplotter menu/setting navigation and fine control even in the worst conditions. You can designate 4 favorite keys to restore your system to a previously saved configuration.

## REACTOR™ AUTOPILOT REMOTE

Part no: 010-12833-10



The ultimate in onboard control and convenience all in the palm of your hand. Bright color display and new gesture controls let you course-correct with ease.



# SPECIFICATIONS



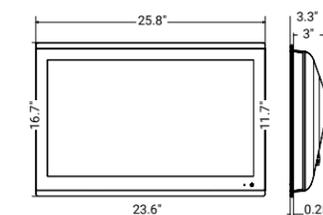
# MFD Chartplotters

	GPSMAP 9227/9027	GPSMAP 9224/9024	GPSMAP 9222/9022	GPSMAP 9219/9019
				
Display Size (diagonal)	27"	24"	22"	19"
Display Type and Resolution (pixels)	4k - 3840 x 2160			
Touch- or Keyed Panel	Multitouch	Multitouch	Multitouch	Multitouch
GPS Receiver	10 Hz GPS/GLONASS, external			
Standard GPS Antenna	External	External	External	External
Number of Waypoints	5,000	5,000	5,000	5,000
Number of Routes	100	100	100	100
J1939 Support	Yes	Yes	Yes	Yes
Garmin SmartMode™	Yes	Yes	Yes	Yes
Digital Switching support	Yes	Yes	Yes	Yes
NMEA 2000® Compatible	Yes	Yes	Yes	Yes
NMEA 0183 Compatible	Yes	Yes	Yes	Yes
Garmin Marine Network Compatible	Garmin BlueNet™ 30 gateway required			
Preloaded Map	Garmin Navionics+™/Worldwide Basemap	Garmin Navionics+™/Worldwide Basemap	Garmin Navionics+™/Worldwide Basemap	Garmin Navionics+™/Worldwide Basemap
Garmin Navionics Vision+™ Compatible	Yes	Yes	Yes	Yes
Auto Guidance+	Included/Compatible	Included/Compatible	Included/Compatible	Included/Compatible
ActiveCaptain® Support	Yes	Yes	Yes	Yes
Sailing Features	Yes	Yes	Yes	Yes
Wi-Fi® and ANT® Wireless Technology	Yes, built-in	Yes, built-in	Yes, built-in	Yes, built-in
GRID™ 20 (Garmin Remote Input Device) Compatible	Yes	Yes	Yes	Yes
FLIR® and Axis® IP Camera Support	Yes	Yes	Yes	Yes
Fusion-Link™ Support	Yes	Yes	Yes	Yes
Video Input	1 BNC composite 2 HDMI (HDCP compliant)			
Video Output	1 HDMI	1 HDMI	1 HDMI	1 HDMI
AIS and DSC Support	Yes	Yes	Yes	Yes
Sonar Module Support	Yes	Yes	Yes	Yes
Supported Frequency (sonar)	Dependent on optional sonar module			
Transmit Power	Dependent on optional sonar module			
Live Sonar Support	Yes	Yes	Yes	Yes
Data Card Slots	2 SD™ cards	2 SD™ cards	2 SD™ cards	2 SD™ cards
Water Rating	IPX7	IPX7	IPX7	IPX7
Mounting Options	Flat or Flush	Flat or Flush	Flat or Flush	Flat or Flush
Power Supply	10-35 V	10-35 V	10-35 V	10-35 V
Typical Current Draw at 12 Vdc	7.2 A	6.5 A	5.2 A	4.6 A
Connections	Built-in wireless connectivity NMEA 2000: 1 port NMEA 0183: 4 in and 2 out Garmin BlueNet network ports: 4 Garmin Marine network: 0 ports USB: 2 ports (USB-C) Video in: 1 BNC composite and 2 HDMI (HDCP compliant), Video out: 1 HDMI J1939: 1 port	Built-in wireless connectivity NMEA 2000: 1 port NMEA 0183: 4 in and 2 out Garmin BlueNet network ports: 4 Garmin Marine network: 0 ports USB: 2 ports (USB-C) Video in: 1 BNC composite and 2 HDMI (HDCP compliant), Video out: 1 HDMI J1939: 1 port	Built-in wireless connectivity NMEA 2000: 1 port NMEA 0183: 4 in and 2 out Garmin BlueNet network ports: 4 Garmin Marine network: 0 ports USB: 2 ports (USB-C) Video in: 1 BNC composite and 2 HDMI (HDCP compliant), Video out: 1 HDMI J1939: 1 port	Built-in wireless connectivity NMEA 2000: 1 port NMEA 0183: 4 in and 2 out Garmin BlueNet network ports: 4 Garmin Marine network: 0 ports USB: 2 ports (USB-C) Video in: 1 BNC composite and 2 HDMI (HDCP compliant), Video out: 1 HDMI J1939: 1 port

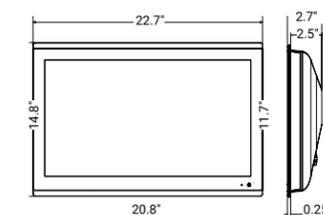
# Chartplotters and Combos

	GPSMAP 8610	GPSMAP 8610xsv	GPSMAP 8612	GPSMAP 8612xsv	GPSMAP 8616	GPSMAP 8616xsv
						
Display Size (diagonal)	10"	10"	12"	12"	16"	16"
Display Type and Resolution (pixels)	WUXGA - 1920 x 1200	WUXGA - 1920 x 1200	FHD - 1920 x 1080			
Touch- or Keyed Panel	Multitouch	Multitouch	Multitouch	Multitouch	Multitouch	Multitouch
GPS Receiver	10 Hz GPS/GLONASS/Galileo					
Standard GPS Antenna	Internal (input for external)					
Number of Waypoints	5,000	5,000	5,000	5,000	5,000	5,000
Number of Routes	100	100	100	100	100	100
J1939 Support	Yes	Yes	Yes	Yes	Yes	Yes
NMEA 2000® Compatible	Yes	Yes	Yes	Yes	Yes	Yes
NMEA 0183 Compatible	Yes	Yes	Yes	Yes	Yes	Yes
Garmin Marine Network Compatible	Yes	Yes	Yes	Yes	Yes	Yes
Preloaded Map	Garmin Navionics+™	Garmin Navionics+				
Garmin Navionics Vision+™ Compatible	Yes	Yes	Yes	Yes	Yes	Yes
Auto Guidance+	Yes	Yes	Yes	Yes	Yes	Yes
ActiveCaptain® Support	Yes	Yes	Yes	Yes	Yes	Yes
SailAssist	Yes	Yes	Yes	Yes	Yes	Yes
Wi-Fi® and ANT® Wireless Technology	Yes	Yes	Yes	Yes	Yes	Yes
GRID™ 20 (Garmin Remote Input Device) Compatible	Yes	Yes	Yes	Yes	Yes	Yes
Wireless Remote Compatible	Yes	Yes	Yes	Yes	Yes	Yes
FLIR® Camera Support	Yes	Yes	Yes	Yes	Yes	Yes
Fusion-Link™ Support	Yes	Yes	Yes	Yes	Yes	Yes
Video Input	1 HDMI					
Video Output	1 HDMI					
AIS and DSC Support	Yes	Yes	Yes	Yes	Yes	Yes
Sonar Module Support	Yes	Yes	Yes	Yes	Yes	Yes
Supported Frequency (sonar) <sup>1</sup>		40 kHz-250 kHz CHIRP, 260/455/800/1200 kHz CHIRP scanning (ClearVü and SideVü)		40 kHz-250 kHz CHIRP, 260/455/800/1200 kHz CHIRP scanning (ClearVü and SideVü)		40 kHz-250 kHz CHIRP, 260/455/800/1200 kHz CHIRP scanning (ClearVü and SideVü)
Transmit Power		1 kW traditional, 1 kW CHIRP		1 kW traditional, 1 kW CHIRP		1 kW traditional, 1 kW CHIRP
Live Sonar Support	Yes	Yes	Yes	Yes	Yes	Yes
Preloaded Quickdraw Contours Software	Yes	Yes	Yes	Yes	Yes	Yes
Data Card Slots	2 micro SD™					
Water Rating	IPX7	IPX7	IPX7	IPX7	IPX7	IPX7
Mounting Options	Bail, Flush or Flat					
Power Supply	10-32 V					
Typical Supply at 12 Vdc	2.0 A	2.7 A	2.4 A	3.1 A	3.5 A	4.2 A
Connections	Built-in wireless connectivity NMEA 2000: 1 port J1939 NMEA 0183: 1 port Marine Network: 2 ports Video in: 1 BNC, 1 HDMI Video out: 1 HDMI USB	Built-in wireless connectivity NMEA 2000: 1 port J1939 NMEA 0183: 1 port Marine Network: 2 ports Video in: 1 BNC, 1 HDMI Video out: 1 HDMI USB	Built-in wireless connectivity NMEA 2000: 1 port J1939 NMEA 0183: 1 port Marine Network: 2 ports Video in: 1 BNC, 1 HDMI Video out: 1 HDMI USB	Built-in wireless connectivity NMEA 2000: 1 port J1939 NMEA 0183: 1 port Marine Network: 2 ports Video in: 1 BNC, 1 HDMI Video out: 1 HDMI USB	Built-in wireless connectivity NMEA 2000: 1 port J1939 NMEA 0183: 1 port Marine Network: 2 ports Video in: 1 BNC, 1 HDMI Video out: 1 HDMI USB	Built-in wireless connectivity NMEA 2000: 1 port J1939 NMEA 0183: 1 port Marine Network: 2 ports Video in: 1 BNC, 1 HDMI Video out: 1 HDMI USB

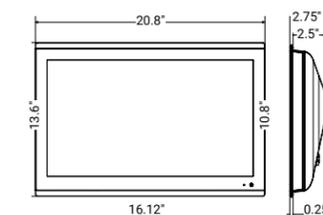
GPSMAP 9227/9027



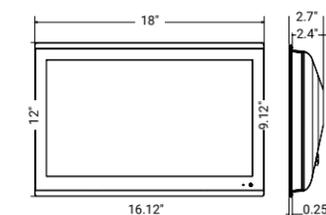
GPSMAP 9224/9024



GPSMAP 9222/9022



GPSMAP 9219/9019



# JL Audio Speakers



	M6 Coaxials	M3 Coaxials	M6 VeX Enclosed Coaxial Systems	M3 VeX	M6 ETXv3	M3 ETXv3
<b>Sizes</b>	6.5" / 7.7" / 8.8"	6.5" / 7.7"	6.5"	6.5"	7.7" / 8.8"	7.7"
<b>Continuous Power Handling (RMS)</b>	6.5": 75 W 7.7": 100 W 8.8": 125 W	6.5": 60 W 7.7": 70 W	75 W	60 W	7.7": 100 W 8.8": 125 W	70 W
<b>Sensitivity (SPL @ 1 watt / 1 meter)</b>	6.5": 89.5 dB 7.7": 91.0 dB 8.8": 90.5 dB	6.5": 89.5 dB 7.7": 90.5 dB	89.5 dB	89.5 dB	7.7": 91.0 dB 8.8": 90.5 dB	90.5 dB
<b>Frequency Response (+/- 3 dB)</b>	6.5": 55 Hz - 25 kHz 7.7": 45 Hz - 25 kHz 8.8": 38 Hz - 20 kHz	6.5": 55 Hz - 25 kHz 7.7": 45 Hz - 25 kHz	100 Hz - 25kHz	100 Hz - 25 kHz	6.5": 45 Hz - 25 kHz 7.7": 38 Hz - 20 kHz	55 Hz - 25kHz
<b>Nominal Impedance</b>	4 Ω	4 Ω	4 Ω	4 Ω	4 Ω	4 Ω
<b>Tweeter Type</b>	Silk Dome	Silk Dome	Silk Dome	Silk Dome	Silk Dome	Silk Dome
<b>Tweeter Size</b>	6.5": 0.8" (20 mm) 7.7": 1" (25 mm) 8.8": 1.25" (32 mm)	0.75" (19 mm)	0.8" (20 mm)	0.75" (19 mm)	7.7": 1" (25 mm) 8.8": 1.25" (32 mm)	0.75" (19 mm)
<b>Cone Material</b>	Injection-molded, mica-filled polypropylene	Injection-molded, mica-filled polypropylene	Injection-molded, mica-filled polypropylene	Injection-molded, mica-filled polypropylene	Injection-molded, mica-filled polypropylene	Injection-molded, mica-filled polypropylene
<b>Mounting Depth Clearance</b>	6.5" (Classic / Sport): 3" (76 mm) 6.5" (Luxe): 3.87" (98 mm) 7.7" (Classic / Sport): 3.32" (84 mm) 7.7" (Luxe): 4.26" (108 mm) 8.8" (Classic / Sport): 5" (127 mm) 8.8" (Luxe): 6.30" (160 mm)	6.5" (Classic / Sport): 2.78" (71 mm) 7.7" (Classic / Sport): 3.17" (81 mm)				
<b>LED Lighting</b>	Yes - Transflective™ (Select Sport models only)	Yes - RGB (Select Sport models only)	Yes - Transflective™ (Select Sport models only)	Yes - RGB (Select Sport models only)	Yes - Transflective™ (Select Sport models only)	Yes - RGB (Select Sport models only)
<b>Warranty</b>	2 years	2 years	2 years	2 years	2 years	2 years
<b>Physical Dimensions (Diameter)</b>	6.5" (Classic / Sport): 6.90" (175 mm) 6.5" (Luxe): 8.34" (212 mm) 7.7" (Classic / Sport): 7.70" (196 mm) 7.7" (Luxe): 7.70" (196 mm) 8.8" (Classic / Sport): 8.80" (224 mm) 8.8" (Luxe): 8.80" (224 mm)	6.5" (Classic / Sport): 6.90" (175 mm) 7.7" (Classic / Sport): 7.70" (196 mm)	7.03" (179 mm)	7.03" (179 mm)	7.7": 7.70" (196 mm) 8.8": 8.80" (224 mm)	7.70" (196 mm)
<b>Physical Dimensions (Depth)</b>	6.5" (Classic): 3.94" (100 mm) 6.5" (Sport): 4.02" (102 mm) 6.5" (Luxe): 4.02" (102 mm) 7.7" (Classic): 4.35" (110 mm) 7.7" (Sport): 4.4" (112 mm) 7.7" (Luxe): 4.4" (112 mm) 8.8" (Classic): 6.37" (162 mm) 8.8" (Sport): 6.45" (164 mm) 8.8" (Luxe): 6.45" (164 mm)	6.5" (Classic): 3.75" (95 mm) 6.5" (Sport): 3.79" (96 mm) 7.7" (Classic): 4.19" (106 mm) 7.7" (Sport): 4.27" (108 mm)	6.16" (156 mm)	6.16" (156 mm)	7.7" (Classic): 12.62" (321 mm) 7.7" (Sport): 12.67" (322 mm) 8.8" (Classic): 14.73" (374 mm) 8.8" (Sport): 14.80" (376 mm)	7.7" (Classic): 12.62" (321 mm) 7.7" (Sport): 12.69" (323 mm)

# JL Audio Subs



	M7 SUBWOOFERS	M6 SUBWOOFERS	M3 SUBWOOFERS
<b>Sizes</b>	12"	8" / 10"	10"
<b>Continuous Power Handling (RMS)</b>	600 W	8": 200 W 10": 250 W	175 W
<b>Sensitivity (SPL @ 1 watt / 1 meter)</b>	86.7 dB	8": 86.8 dB 10" (IB): 86.1 dB 10" (W): 86.4 dB	87.23 dB
<b>Nominal Impedance</b>	4 Ω	4 Ω	4 Ω
<b>Cone Material</b>	Injection-molded, mica-filled polypropylene	Injection-molded, mica-filled polypropylene	Injection-molded, mica-filled polypropylene
<b>Voice Coil Diameter</b>	4" (102 mm)		
<b>Mounting Depth Clearance</b>	7.94" (202 mm)	8" (Classic / Sport): 5" (127 mm) 8" (Luxe): 6.30" (160 mm) 10" (Classic / Sport): 5.90" (150 mm) 10" (Luxe): 6.98" (177 mm)	5" (127 mm)
<b>LED Lighting</b>	Yes - Transflective™ (Select Sport models only)	Yes - Transflective™ (Select Sport models only)	Yes - RGB (Select Sport models only)
<b>Warranty</b>	2 years	2 years	2 years
<b>Physical Dimensions (Diameter)</b>	14" (356 mm)	8": 8.80" (224 mm) 8" (Luxe): 8.70 lb / 3.90 kg 10": 10.75 (273 mm) 10" (Luxe): 10.25 (260 mm)	10.75 in (273 mm)
<b>Physical Dimensions (Depth)</b>	12" (Classic): 9.39" (239 mm) 12" (Sport): 9.42" (240 mm)	8" (Classic): 6.37" (162 mm) 8" (Sport): 6.45" (164 mm) 10": 7.56" (192 mm)	10" (Classic): 6.50" (165 mm) 10" (Sport): 6.58" (203 mm)
<b>Driver Displacement</b>	0.148 cu ft (4.19 L)	8" (Luxe): 0.073cu ft (2.07 L) 8": 0.033 cu ft (0.93 L) 10": 0.052 cu ft (1.47 L) 10" (Luxe): 0.099 cu ft (2.80 L)	0.052 cu ft (1.47 L)
<b>Sealed Enclosure Specifications</b>			
<b>Volume (net int.)</b>	3.00 cu ft (85 L)	8" / 10" (IB): 2.00 cu ft (56.6 L) 10" (W): 0.75 cu ft (21.2 L)	2.00 cu ft (56.6 L)
<b>Ported Enclosure Specifications</b>			
<b>Volume (net int.)</b>	5.00 cu ft (141.6 L)	8": 1.50 cu ft (42.5 L) 10" (IB): 2.5 cu ft (70.8 L) 10" (W): 2 cu ft (56.6 L)	
<b>Internal Port Diameter (ID)</b>	5" (127 mm)	8": 4" (102 mm) 10" (IB): 4" (102 mm) 10" (W): 3" (76 mm)	
<b>Port Length (L)</b>	13.5" (343 mm)	8": 13.5" (343 mm) 10" (IB): 12" (305 mm) 10" (W): 11.125" (283 mm)	
<b>Tuning Frequency (Fb)</b>	25 Hz	8": 37 Hz 10" (IB): 30 Hz 10" (W): 31 Hz	

\* The enclosure recommendations listed above are external dimensions which assume the use of 0.75 in (19 mm) thick material. If you are using 0.625 in (16 mm) thick material, subtract 0.25 in (6.5 mm) from each dimension. Do not use any material with a thickness of less than 0.625 in (16 mm) because this may compromise the rigidity of the enclosure.

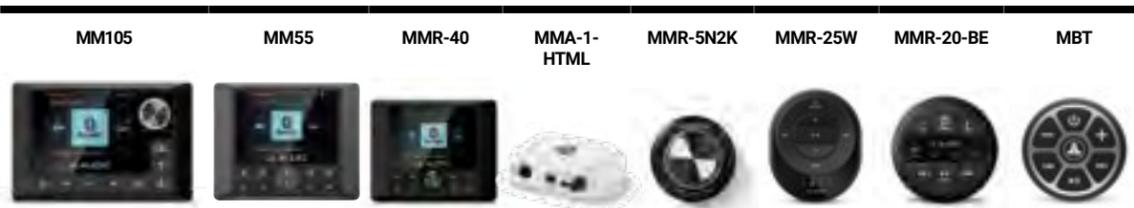
\* All enclosure volumes listed above are net internal volumes! Driver displacement, port displacement and brace displacement must be added to obtain the final gross internal volume. All enclosure dimensions above have already taken this into account.

\* When using multiples in a common enclosure you will need to recalculate the enclosure and port dimensions. For assistance please contact your authorized JL Audio dealer or JL Audio technical support.

\* We recommend the use of this in a bi-amplified system using high-quality satellites and a high-quality amplifier. We do not recommend the use of this with a passive crossover (coil), because this type of device will adversely affect performance.

\* All specifications are subject to change without notice.

# JL Audio Source Units



	MM105	MM55	MMR-40	MMA-1-HTML	MMR-5N2K	MMR-25W	MMR-20-BE	MBT
<b>Rated Continuous (RMS) Power (14.4 V input @ 4 Ω &lt; 1% THD)</b>	N/A	25 W x 4	N/A	N/A	N/A	N/A	N/A	N/A
<b>Built-in Amplifier</b>	No	Class-D (2 Ω stereo-stable)	No	No	No	No	No	No
<b>Multi-Zone™ Technology</b>	Yes	Yes	No	No	No	No	No	Controller: Yes Receiver: No
<b>Display</b>	MM105: 3.5" optically bonded color TFT LCD, backlit MM105-HR: N/A	MM55: 2.8" optically bonded color TFT LCD, backlit MM55-HR: N/A	2.8" color TFT LCD, backlit	N/A	N/A	LED zone indicator	LED source indicator	N/A
<b>Line Out (requires external amplification)</b>	4 (L + R per zone)	3 (L + R per zone)	None	None	None	None	None	Controller: 2 (L + R per zone) Receiver: 1 (L + R)
<b>Subwoofer Out (requires external amplification)</b>	4 (1 mono output per zone)	3 (1 mono output per zone)	None	None	None	None	None	Controller: Zone 1 (1 mono output) Receiver: None
<b>Auxiliary Inputs (Stereo RCA)</b>	2 (2 V or 1 V RMS Input Sensitivity)	1 (2 V or 1 V RMS Input Sensitivity)	None	None	None	None	None	None
<b>AM/FM Ports (Motorola Antenna Connector)</b>	1	1	None	None	None	None	None	None
<b>Supported Sources</b>	AM/FM with RDS Digital HD Radio (North America only) DAB+ (Europe only) / BLUETOOTH® / USB audio / iPhone / iPod / AUX x2 / SiriusXM-Ready® (U.S. and CA only, requires subscription and SiriusXM® Connect vehicle tuner)	Digital AM/FM with RDS / DAB+ (Europe only) / BLUETOOTH® / USB audio / iPhone / iPod / AUX	Derived from host source unit	Derived from host source unit	N/A	Derived from host source unit	Derived from host source unit	BLUETOOTH®
<b>USB 2.0 Ports</b>	2 USB1: High-speed connection for use with iPhone®/iPod® (MFi Certified) or USB storage device (1 A charging output) USB2: Full-speed USB storage device connection (500 mA charging output)	1 USB storage device (1 A charging output)	1 (Software update only)	1 (Software update only)	None	None	None	None
<b>BLUETOOTH® Wireless Technology</b>	Yes	Yes	No	No	No	Yes	No	Yes
<b>SiriusXM-Ready</b>	Yes	No	No	No	No	No	No	No
<b>DAB+ Ready</b>	Yes	Yes	No	No	No	No	No	No
<b>NMEA 2000® LEN</b>	1 (50 mA)	1 (50 mA)	4 (200 mA)	1 (50 mA)	2 (100 mA)			N/A
<b>MediaMaster® App via BLUETOOTH</b>	Yes	Yes	No	No	No	No	No	No
<b>Control Surface Dust/Water Rating (when properly installed)</b>	MM105: IP67 MM105-HR: IP66	IP67	IP66		IPX7	IP68	IP67	Controller: IP67 Receiver: IPX7
<b>Warranty</b>	2 years	2 years	2 years	2 years	2 years	2 years	2 years	2 years

# JL Audio Amplifiers



	MVI	MHD	XDM	MX
<b>Channels</b>	Monoblock / 2 / 4 / 5 / 6 / 8	Monoblock / 4 / 5	Monoblock / 2 / 3 / 4 / 5 / 6 / 8	Monoblock / 3 / 4
<b>Physical Dimensions (Height)</b>	2.05" (52 mm)	1.93" (49 mm)	2.05" (52 mm)	1.77" (45 mm)
<b>Physical Dimensions (Width)</b>	Monoblock (600 W) / 2 / 4-channel: 11.20" (285 mm) Monoblock (1000 W) / 5 (700 W / 1000 W) / 6 / 8-channel: 13.96" (355 mm)	10.74" (273 mm)	Monoblock (300 W) / 2-channel: 6.85" (174 mm) Monoblock (600 W) / 3 / 4-channel: 8.52" (216 mm) 5 (700 W) / 6-channel: 10.23" (260 mm) Monoblock (1000 W) / 5 (1000 W) / 8-Channel: 14.73" (374 mm)	Monoblock (300 W) / 4-channel (280 W): 8.66" (220 mm) Monoblock (500 W) / 3 / 4-channel (500 W): 9.33" (237 mm)
<b>Physical Dimensions (Depth)</b>	6.93" (176 mm)	7.85" (199 mm)	7.09" (180 mm)	Monoblock (300 W) / 4-channel (280 W): 3.09" (78.5 mm) Monoblock (500 W) / 3 / 4-channel (500 W): 4.50" (115 mm)
<b>Rated Continuous (RMS) Power (14.4 V input @ 2 Ohm &lt; 1% THD)</b>	Monoblock (600 W): 600 W x 1 Monoblock (1000 W): 1000 W x 1 2-channel: 300 W x 2 4-channel: 100 W x 4 5-channel (700 W): Main: 100 W x 4 / Sub: 180 W x 1 5-channel (1000 W): Main: 100 W x 4 / Sub: 600 W x 1 6-channel: 100 W x 6 8-channel: 100 W x 8	Monoblock: 750 W x 1 4-channel: 150 W x 4 / 300 W x 2 (Bridged) 5-channel: Main: 75 W x 4 / Sub: 500 x 1	Monoblock (300 W): 300 W x 1 Monoblock (600 W): 600 W x 1 Monoblock (1000 W): 1000 W x 1 2-channel: 100 W RMS x 2 3-channel: Main: 100 W x 2 / Sub: 300 W x 1 4-channel: 100 W RMS x 4 5-channel (700 W): Main: 100 W x 4 / Sub: 300 W x 1 5-channel (1000 W): Main: 100 W x 4 / Sub: 600 W x 1 6-channel: 100 W x 6 8-channel: 100 W x 8	Monoblock (300 W): 300 W x 1 Monoblock (500 W): 500 W x 1 3-channel: Main: 100 W x 2 / Sub: 400 W x 1 4-channel (280 W): 70 W x 4 4-channel (500 W): 125 W x 4
<b>Rated Continuous (RMS) Power (28.8 V input @ 2 Ohm &lt; 1% THD)</b>		4-channel (24 V): 150 W x 4 / 300 W x 2 (Bridged) 5-channel (24 V): Main: 75 W x 4 / Sub: 500 x 1	6-channel (24 V): 100 W x 6 8-channel (24 V): 100 W x 8	
<b>S/N Ratio, referred to highest rated power: Analog Inputs (A-weighted, 20 Hz - 20 kHz noise bandwidth)</b>	Monoblock (600 W): 90 dB Monoblock (1000 W): 87 dB 2 / 4 / 6 / 8-channel: 99 dB 5-channel (700 W / 1000 W): 99 dB	Monoblock: >110 dB below rated power 4-channel: >110 dB 5-channel: >108.5 dB below rated power	Monoblock (300 W): >100 dB Monoblock (600 W): >87 dB Monoblock (1000 W): >83 dB 2 / 4 / 6-channel: >104 dB 3 / 5-channel: >104 dB	Monoblock (300 W): >85 dB Monoblock (500 W): >97 dB 4-channel (280 W): >89.5 dB 4-channel (500 W): >88 dB 3-channel: >88 dB
<b>Frequency Response (+0, -1dB)</b>	Monoblock (600 W / 1000 W): 12 Hz - 500 Hz 2 / 4 / 6-channel: 12 Hz - 24 kHz 8-channel: 12 Hz - 21 kHz 5-channel (700 W / 1000 W), Main Channels: 12 Hz - 24 kHz 5-channel (700 W / 1000 W), Subwoofer Channel: 12 Hz - 1 kHz	Monoblock: 6 Hz - 8 kHz 4-channel: 6 Hz - 30 kHz 5-channel, Main Channels: 12 Hz - 28 kHz 5-channel, Subwoofer Channel: 12 Hz - 10 kHz	Monoblock (300 W): 10 Hz - 1 kHz Monoblock (600 W / 1000 W): 7 Hz - 500 Hz 2 / 4 / 6-channel: 12 Hz - 22 kHz 3 / 5-channel (700 W / 1000 W), Main Channels: 12 Hz - 22 kHz 3 / 5-channel (700 W / 1000 W), Subwoofer Channel: 10 Hz - 1 kHz	Monoblock (300 W) / 3 / 4-channel (280 W / 500 W): 20 Hz - 20 kHz Monoblock (500 W) / 4-channel (280 W / 500 W): 20 Hz - 12 kHz
<b>Input Voltage Range @ RCA Inputs</b>	Monoblock (600 W / 1000 W): 250 mV - 8 V RMS 2 / 4 / 6 / 8-channel: 250 mV - 16 V RMS	Switchable from 200 mV - 2 V RMS (Low) to 800 mV - 8 V RMS (High)	Monoblock (300 W / 600 W / 1000 W) / 2 / 3 / 4-channel: 200 mV - 4 V RMS	Monoblock (300 W): Switchable from 250 mV - 4 V RMS (Low) to 580 mV - 14 V RMS (High) Monoblock (500 W) / 4-channel (280 W / 500 W): Switchable from 250 mV - 4 V RMS (Low) to 750 mV - 15 V RMS (High)
<b>Warranty</b>	2 years	2 years	2 year	2 year

# Fusion Stereo Comparison

MS-RA770



MS-RA670



MS-WB675



MS-SRX400



	MS-RA770	MS-RA670	MS-WB675	MS-SRX400
<b>Peak Power</b>	280 W (4x70 W)	280 W (4x70 W)	280 W (4x70 W)	140 W (2x70 W)
<b>Amplifier</b>	Class-D	Class-D	Class-D	Class-D
<b>Multi-Zone™ Technology</b>	4 zones	3 zones	4 zones	No
<b>Display</b>	4.3" optically bonded color LCD touchscreen	2.7" optically bonded color LCD	No	2.7" optically bonded color LCD
<b>Line Out</b>	4 (1 x L + R per zone)	3 (1 x L + R per zone)	4 (1 x L + R per zone)	1 (1 x L + R)
<b>Subwoofer Out</b>	4 (1 per zone)	3 (1 per zone)	4 (1 per zone)	1 (mono output)
<b>Auxiliary Inputs</b>	2 x RCA inputs	1 x RCA input	1 x RCA input	No
<b>Tuner</b>	AM/FM with RDS (where available)	AM/FM with RDS (where available)	AM/FM with RDS (where available)	AM/FM with RDS (where available)
<b>Built-in Wi-Fi®</b>	Yes	No	No	Yes
<b>iPod®/iPhone®</b>	Yes	Yes	Yes	No
<b>Android™/Windows® MTP Support</b>	Yes	Yes	Yes	No
<b>AOA Support</b>	Yes	Yes	Yes	Yes
<b>USB</b>	Yes - 1 connection	Yes - 1 connection	Yes - 1 connection	No
<b>BLUETOOTH® Wireless Technology</b>	Yes	Yes	Yes	Yes
<b>SiriusXM®-ready</b>	Yes (continental U.S. and Canada only)	Yes (continental U.S. and Canada only)	Yes (continental U.S. and Canada only)	No
<b>Optical Audio Input</b>	Yes	Yes	Yes	No
<b>DAB+ Ready</b>	Yes	Yes	Yes	No
<b>Fusion-Link™ via NMEA 2000®</b>	Yes	Yes	Yes	No
<b>Fusion-Link via Ethernet/Wi-Fi</b>	Yes	Yes	Yes	Yes
<b>Fusion Audio App via BLUETOOTH</b>	Yes	Yes	Yes	Yes
<b>Fusion Audio App via ANT®</b>	Yes	Yes	Yes	No
<b>Water Resistance (IP rating)</b>	IPX6 and IPX7 front panel	IPX6 and IPX7 front panel	IPX2	IPX6 and IPX7 front panel
<b>Chassis</b>	Electrically isolated, impact-resistant plastic	Electrically isolated, impact-resistant plastic	Electrically isolated, impact-resistant plastic with heat sink	Electrically isolated, impact-resistant plastic
<b>Mounting Options</b>	Flush and flat	Flush and flat	Surface	Flush and flat
<b>Warranty</b>	3 years	3 years	3 years	3 years

# Fusion Stereo Comparison

MS-RA210



MS-RA70  
MS-RA70N  
MS-RA70NSX



MS-RA60



MS-BB100



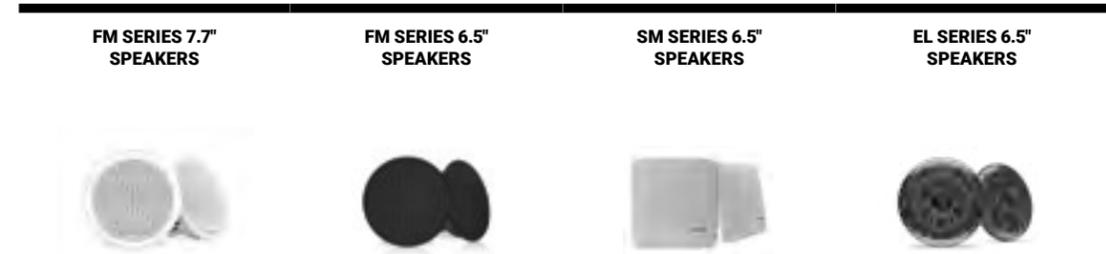
	MS-RA210	MS-RA70 MS-RA70N MS-RA70NSX	MS-RA60	MS-BB100
<b>Peak Power</b>	200 W (4x50 W)	200 W (4x50 W)	180 W (4x45 W)	200 W (4x50 W)
<b>Amplifier</b>	Class-D	Class-AB	Class-D	Class-AB
<b>Multi-Zone™ Technology</b>	2 zones	2 zones	2 zones	2 zones
<b>Display</b>	2.7" optically bonded color LCD	2.6" optically bonded monochrome LCD	2.3" perimeter bonded monochrome LCD	No
<b>Line Out</b>	2 (1 x L + R per zone)	2 (1 x L + R per zone)	1 (1 x L + R zone 1)	2 (1 x L + R per zone)
<b>Subwoofer Out</b>	2 (1 per zone)	1 (zone 1)	1 (zone 1)	1 (zone 1)
<b>Auxiliary Inputs</b>	1 x RCA input	1 x RCA input	1 x RCA input	1 x RCA input
<b>Tuner</b>	AM/FM with RDS (where available)	AM/FM with RDS (where available)	AM/FM with RDS (where available)	AM/FM with RDS (where available)
<b>Built-in Wi-Fi®</b>	No	No	No	No
<b>iPod®/iPhone®</b>	Yes	Yes	No	Yes
<b>Android™/Windows® MTP Support</b>	Yes	No	No	No
<b>AOA Support</b>	Yes	Yes	No	Yes
<b>USB</b>	Yes - 1 connection	Yes - 1 connection	No	Yes - 1 connection
<b>BLUETOOTH® Wireless Technology</b>	Yes	Yes	Yes	Yes
<b>SiriusXM®-ready</b>	Yes (continental U.S. and Canada only)	MS-RA70NSX only (continental U.S. and Canada only)	No	No
<b>Optical Audio Input</b>	No	No	No	No
<b>DAB+ Ready</b>	Yes	MS-RA70 and MS-RA70N only	Yes	Yes
<b>Fusion-Link™ via NMEA 2000®</b>	Yes	MS-RA70N and MS-RA70NSX only	No	Yes
<b>Fusion-Link via Ethernet/Wi-Fi</b>	No	No	No	No
<b>Fusion Audio App via BLUETOOTH</b>	Yes	Yes	Yes	Yes
<b>Fusion Audio App via ANT®</b>	Yes	Yes	Yes	Yes
<b>Water Resistance (IP rating)</b>	IPX6 and IPX7 front panel	IPX7 front panel	IPX6 and IPX7 front panel	IPX3 black box with IPX7 remote
<b>Chassis</b>	Electrically isolated, impact-resistant plastic	Glass reinforced composite	Electrically isolated, impact-resistant plastic	Aluminum
<b>Mounting Options</b>	Flush and flat	Flush and flat	Flush and flat	Flush and flat (remote)
<b>Warranty</b>	1 year	1 year	1 year	1 year

# Fusion Speaker Comparison



	Apollo 8.8" Speakers	Apollo 7.7" Speakers	Apollo 6.5" Speakers	XS Series 7.7" Speakers	XS Series 6.5" Speakers	XS Series 4" Speakers	SG-TW101SPW
Speaker Size	8.8"	7.7"	6.5"	7.7"	6.5"	4"	1"
Peak Power (watts)	520	400	300	240	200	120	330
RMS Power Rating (watts)	130	100	75	60	50	30	60
Efficiency (1 W @ 1 m)	91 dB	91 dB	90 dB	92 dB	91 dB	87 dB	91 dB
Frequency Response	50 Hz - 20 kHz	60 Hz - 22 kHz	70 Hz - 22 kHz	70 Hz - 18 kHz	80 Hz - 18 kHz	100 Hz - 18 kHz	3 kHz - 20 kHz
Impedance	4 ohms	4 ohms	4 ohms	4 ohms	4 ohms	4 ohms	4 ohms
Tweeter Type	Silk dome	Silk dome	Silk dome	Aluminum dome	Aluminum dome	Aluminum dome	Aluminum dome
Cone Material	CURV®	CURV®	CURV®	Polypropylene	Polypropylene	Polypropylene	N/A
Voice Coil Diameter	1.5"	1.4"	1.2"	1.18"	1.18"	1"	1"
Mounting Diameter Clearance	7.09" (180 mm)	6.14" (156 mm)	5.35" (136 mm)	6.38" (162 mm)	5.31" (135 mm)	3.90" (99 mm)	2.01" (51 mm)
Mounting Depth Clearance	4.13" (105 mm)	3.39" (86 mm)	3.03" (77 mm)	3.03" (77 mm)	2.64" (67 mm)	2.13" (54 mm)	1.22" (31 mm)
LED Lighting	CRGBW	CRGBW	CRGBW	RGB (select models)	RGB (select models)	No	No
Warranty	3 years	3 years	3 years	3 years	3 years	3 years	3 years

# Fusion Speaker Comparison



	FM SERIES 7.7" SPEAKERS	FM SERIES 6.5" SPEAKERS	SM SERIES 6.5" SPEAKERS	EL SERIES 6.5" SPEAKERS
Speaker Size	7.7"	6.5"	6.5"	6.5"
Peak Power (watts)	200	120	100	80
RMS Power Rating (watts)	50	30		20
Efficiency (1 W @ 1 m)	91 dB	87 dB	84 dB	88 dB
Frequency Response	80 Hz - 18 kHz	100 Hz - 18 kHz	150 Hz - 20 kHz	45 Hz - 16 kHz
Impedance	4 ohms	4 ohms	4 ohms	4 ohms
Tweeter Type	Aluminum dome	Aluminum dome	None	None
Cone Material	Polypropylene	Polypropylene	Polypropylene	Polypropylene
Voice Coil Diameter	1.18"	1"	0.79"	0.79"
Mounting Diameter Clearance	6.50" (165 mm)	5.43" (138 mm)	5.12" (130 mm)	5.12" (130 mm)
Mounting Depth Clearance	3.27" (83 mm)	2.76" (70 mm)	0.94" (24 mm)	1.69" (43 mm)
LED Lighting	No	No	No	RGB (select models)
Warranty	3 years	3 years	1 year	1 year



# Fusion Remotes and Accessories Comparison

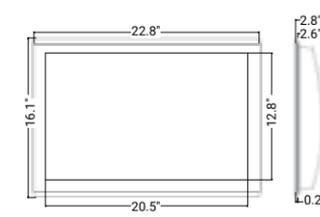
	Apollo MS-ERX400	MS-NRX300	MS-ARX70	Signature Series Wake Tower Mounting Brackets	XS Series Wake Tower Mounting Brackets	Speaker Lighting Remotes
						
<b>Physical Dimensions</b>	Remote Dimensions Including Cable: 4.32" x 2.76" x 2.80" (110 x 70 x 71.4 mm)	Remote Dimensions: 4.33" x 2.76" x 1.97" (110 x 70 x 50 mm)	Remote Dimensions: 2.56" x 0.43" (65 x 10.8 mm)	Universal Fixed Mount Bracket Dimensions: 6.85" x 3.70" x 2.05" (174 x 94 x 52 mm) Universal Swivel Mount Bracket Dimensions: 6.85" x 4.72" x 2.05" (174 x 120 x 52 mm) Deck Mount Bracket Dimensions: 4.84" x 3.31" x 2.36" (123 x 84 x 60 mm)	Pipe Mount 2.5" Bracket Dimensions: 3.94" x 3.70" x 1.87" (100 x 94 x 47.5 mm) Pipe Mount 2" Bracket Dimensions: 3.35" x 2.91" x 1.89" (85 x 74 x 48 mm) Flat Mount Bracket Dimensions: 3.54" x 2.91" x 1.89" (90 x 74 x 48 mm)	Wireless Remote Dimensions: 5.91" x 1.57" (150 x 40 mm) Lighting Control Module Dimensions: 3.35" x 1.77" (85 x 45 mm)
<b>Weight</b>	Excluding cable 3.5 oz (100 g)		With mount: 1.6 oz (30 g) Without mount: 0.88 oz (25 g)	Universal Fixed Mount Bracket: 2.4 lbs (1.1 kg) Universal Swivel Mount Bracket: 3.0 lbs (1.3 kg) Deck Mount Bracket: 1.7 lbs (0.8 kg)		
<b>Water Rating</b>	IPX6 and IPX7	IPX7	IPX6 and IPX7			
<b>Power Input</b>	10.8-32 VDC	10.8-16 VDC				10.8-16 VDC
<b>Operating Temperature Range</b>	32° to 122° F (0° to 50° C)	32° to 122° F (0° to 50° C)	32° to 122° F (0° to 50° C)			32° to 122° F (0° to 50° C)
<b>Current (max.)</b>	150 mA at 12 VDC 125 mA at 14.4 VDC	110 mA at 12 VDC				2A max per color
<b>Compass-safe Distance</b>	6.1" (150 mm)		2" (50 mm)			
<b>Display</b>	2.7" optically bonded color LCD	2.6" optically bonded monochrome LCD				
<b>Wireless Range</b>			Up to 33' (10 m)			Up to 33' (10 m)
<b>Battery Type</b>						AAA (2 batteries required)
<b>Materials</b>				Aluminum alloy	Aluminum alloy	
<b>Radio Frequency/Protocol</b>			2.4 GHz at 6.42 dBm nominal			2.4 GHz at 10dB nominal
<b>Multi-language Interface</b>	Yes					
<b>Software Updates</b>	Over-the-air software updates via the Fusion® Audio app when connected to an external wireless router or Apollo Series stereo network enabled with Wi-Fi technology via Ethernet					
<b>Speakers and Subwoofers Controlled</b>						CRGBW Remote: Up to 5 pairs of CRGBW speakers or 5 CRGBW subwoofers RGB Remote: Up to 4 pairs of RGB speakers or 4 RGB subwoofers
<b>Supported Wake Tower Bar Sizes</b>				Universal Fixed and Universal Swivel brackets only: Ø 1.31" (33.4 mm), Ø 1.66" (42.2 mm), Ø 1.90" (48.3 mm), Ø 2" (50.8 mm), Ø 2.25" (57.2 mm), Ø 2.37" (60.3 mm) and Ø 2.50" (63.5 mm)	Pipe Mount 2.5" Bracket: Ø 2" to 2.5" (Ø 50.8 to 63.5 mm); user adjustable Pipe Mount 2" Bracket: Ø 1.31" to 2" (Ø 33.4 to 50.8 mm); user adjustable	
<b>Warranty</b>	3 years	3 years	1 year	1 year	1 year	1 year
<b>Connection</b>	One power over Ethernet port	One NMEA 2000 port				



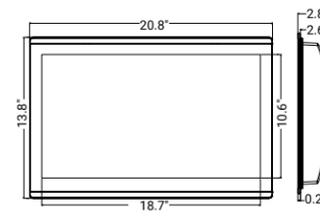
# Combos

	<b>GPSMAP 1242xsv/1242</b> <b>GPSMAP 1042xsv/1042</b>	<b>GPSMAP 1643xsv/1643</b> <b>GPSMAP 1243xsv/1243</b> <b>GPSMAP 943xsv/943</b> <b>GPSMAP 743xsv/743</b>	<b>ECHOMAP Ultra 2</b> <b>106sv/106 and</b> <b>ECHOMAP Ultra 2</b> <b>126sv/126</b>	<b>ECHOMAP UHD2 52cv/53cv/54cv and</b> <b>ECHOMAP UHD2 72cv/73cv/74cv</b>	<b>ECHOMAP UHD2 62sv/63sv/64sv/65sv and</b> <b>ECHOMAP UHD2 72sv/73sv/74sv/75sv and</b> <b>ECHOMAP UHD2 92sv/93sv/94sv/95sv</b>
<b>Display Size (diagonal)</b>	12" (1242xsv/1242) 10" (1042xsv/1042)	16" (1643xsv/1643) 12" (1243xsv/1243) 9" (943xsv/943) 7" (743xsv/743)	16" (1643xsv/1643) 12" (126xsv/126) 10" (106xsv/106)	5" and 7"	6", 7", 9"
<b>Display Type and Resolution (pixels)</b>	WXGA - 1280 x 800 (1242xsv/1242) WSVGA - 1024 x 600 (1042xsv/1042)	FHD - 1920 x 1080 (1643xsv/1643) WXGA - 1280 x 800 (1243xsv/1243) 9" (943xsv/943) WSVGA - 1024 x 600 (743xsv/743)	WXGA, ISP 1280 x 800	WXGA - 800 x 480	9" - 1024 x 600 6" / 7" - 800 x 480
<b>Touch or Keyed Panel</b>	Keyed	Multitouch	Touchscreen with keyed assist	Keyed	Touchscreen with keyed assist
<b>GPS Receiver</b>	10 Hz GPS/GLONASS, internal	10 Hz GPS/GLONASS, internal	10 KHZ, Multiband, Internal	5 Hz GPS/GLONASS, internal	10 KHZ, Multiband, Internal
<b>Standard GPS Antenna</b>	Internal (input for external)	Internal (input for external)	Internal (input for external)	Internal (input for external)	Internal (input for external)
<b>Number of Waypoints</b>	5,000	5,000	5,000	5,000	5,000
<b>Number of Routes</b>	100	100	100	100	100
<b>NMEA 2000<sup>®</sup> Compatible</b>	Yes	Yes	Yes	No	Yes
<b>NMEA 0183 Compatible</b>	Yes	Yes	No	No	No
<b>Garmin Marine Network Compatible</b>	Yes	Yes	Yes	Yes	Yes
<b>OneHelm</b>	No	Yes	Yes	No	No
<b>Wireless Networking</b>	No	No	Yes	Yes	Yes
<b>Preloaded Map</b>	Garmin Navionics+™	Garmin Navionics+	Garmin Navionics+	Garmin Navionics+	Garmin Navionics+
<b>Garmin Navionics+™/Vision+™ Compatible</b>	Yes	Yes	Yes	Yes	Yes
<b>Auto Guidance+</b>	Yes	Yes	Yes	Downloadable via Active Captain	Downloadable via Active Captain
<b>ActiveCaptain<sup>®</sup> Support</b>	Yes	Yes	Yes	Yes	Yes
<b>SailAssist</b>	Yes	Yes	Yes	Yes	Yes
<b>Wi-Fi<sup>®</sup> Wireless Connectivity</b>	Yes	Yes	Yes	Yes	Yes
<b>ANT<sup>®</sup> Wireless Connectivity</b>	Yes	Yes	Yes	No	No
<b>GRID™ 20 (Garmin Remote Input Device) Compatible</b>	Yes	Yes	No	No	No
<b>Wireless Remote Compatible</b>	Yes	Yes	No	No	No
<b>FLIR<sup>®</sup> Camera Support</b>	Yes	Yes	No	No	No
<b>Fusion-Link™ Support</b>	Yes	Yes	Yes	No	No
<b>Video Input/Output</b>	1 BNC	1 BNC Video Output: 1 HDMI 12" and 16"	No	No	No
<b>AIS and DSC Support</b>	Yes	Yes	Yes	No	No
<b>Traditional HD ID 77/200</b>	Yes (xsv)	Yes (xsv)	Yes	Yes	Yes
<b>Traditional HD ID 50/200</b>	Yes (xsv)	Yes (xsv)	Yes	Yes	Yes
<b>Traditional CHIRP</b>	Yes (xsv)	Yes (xsv)	Yes	Yes	Yes
<b>CHIRP ClearVu</b>	Yes (xsv)	Yes (xsv)	Yes	Yes	Yes
<b>CHIRP SlideVu</b>	Yes (xsv)	Yes (xsv)	Yes	No	Yes
<b>Dual-channel CHIRP</b>	No	No	No	No	No
<b>Ultra High-Definition Scanning Sonar</b>	No	Yes	Yes	Yes	Yes
<b>Optional Sonar Support</b>	Yes	Yes	Yes	No	No
<b>Internal Sonar Sharing</b>	Yes (xsv)	Yes (xsv)	Yes, wireless with another UHD2 or Ultra 2	Yes, wireless with another UHD2 or Ultra 2	Yes, wireless with another UHD2 or Ultra 2
<b>Transmit Power</b>	1 kW traditional, 1 kW CHIRP (xsv)	1 kW traditional, 1 kW CHIRP (xsv)	600 W	Up to 500 W (RMS)	Up to 500 W (RMS)
<b>Live Sonar Support</b>	Yes	Yes	Yes	No	Yes
<b>Preloaded Quickdraw Contours Software</b>	Yes	Yes	Yes	Yes	Yes
<b>Data Card Slots</b>	2 SD™ cards	2 microSD™ cards	2 microSD™ cards	1 microSD™ card	1 microSD™ card
<b>Water Rating</b>	IPX7	IPX7	IPX7	IPX7	IPX7
<b>Mounting Options</b>	Bail or Flush	Bail, Flush or Flat	Bail or Flush	Bail or Flush	Bail or Flush
<b>Power Supply</b>	10-32 V	10-32 V	10-20 V	10-20 V	10-20 V
<b>Typical Current Draw at 12 Vdc</b>	2.5 A	3.61 A (2.9 A (16") 2.2 A (12") 1.8 A (9") 1.5 A (7"))	2.2 A (106xsv/106) 2.5 A (126xsv/126)	1.95 A	1.52 A
<b>Connections</b>	Built-in wireless connectivity NMEA 2000: 1 port NMEA 0183: 1 port Marine Network: 2 ports Video in: 1 BNC	Built-in wireless connectivity USB: 1 port, NMEA 2000: 1 port, NMEA 0183: 1 port Marine Network: 2 ports (16" and 12") 1 port (9" and 7") Video in: 1 BNC J1939 (16" and 12")	NMEA 2000: 1 port NMEA 0183: 1 in and 1 out Marine Network: 2 ports	N/A	NMEA 2000: 1 port NMEA 0183: 1 in and 1 out Marine Network: 1 port

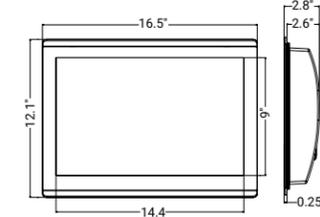
GPSMAP 8624



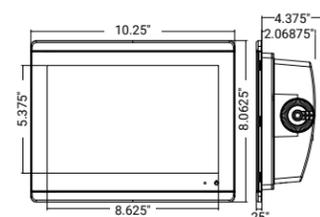
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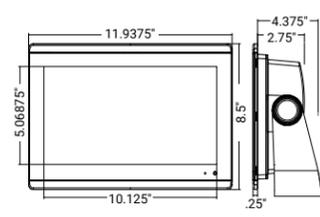
GPSMAP 8617



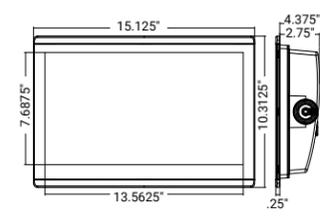
GPSMAP 8610/8610XSV



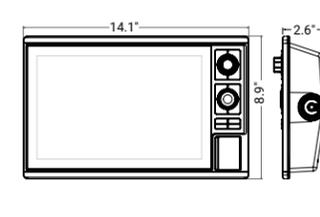
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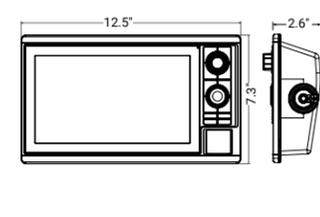
GPSMAP 8616/8616XSV



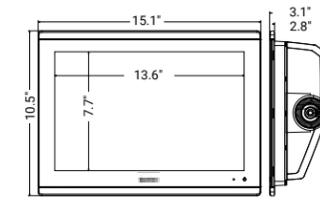
GPSMAP 1242 SERIES



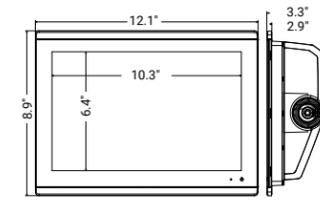
GPSMAP 1042 SERIES



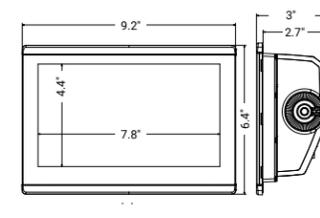
GPSMAP 1643/1643XSV



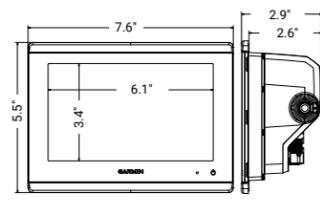
GPSMAP 1243/1243XSV



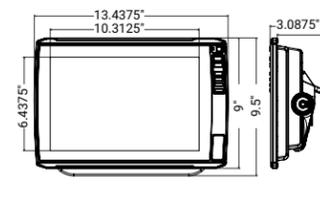
GPSMAP 943/943XSV



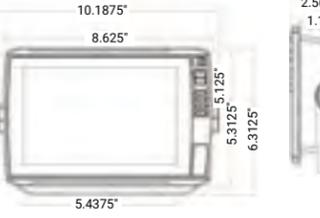
GPSMAP 743/743XSV



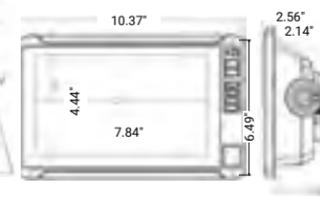
ECHOMAP ULTRA 2 126/122SV



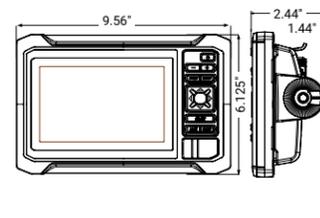
ECHOMAP ULTRA 2 106/102SV



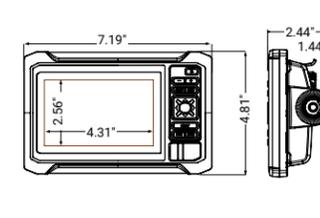
UHD2 94SV/93SV/92SV



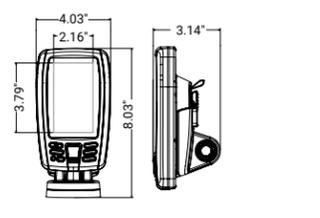
ECHOMAP UHD2 74CV/73CV/72CV



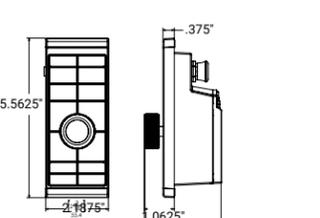
ECHOMAP UHD2 54CV/53CV/52CV



ECHOMAP PLUS 44CV/43CV



GARMIN GRID 20



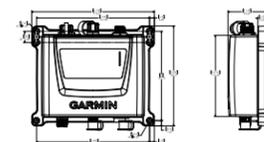
# Instruments

	GMI 20	GNX Wind GNX 20 and GNX 21	GNX 120	GNX 130
				
<b>Bonded Display</b>	Yes	Yes	Yes	Yes
<b>Display Type</b>	Color, QVGA	21-inverted LCD, monochrome 20-standard LCD, monochrome	Inverted LCD, monochrome	Inverted LCD, monochrome
<b>Physical Size (WxH)</b>	4.33" x 4.53" x 1.18" (110 mm x 115 mm x 30 mm)	4.33" x 4.53" x 1.18" (110 x 115 x 30 mm)	7.11" x 4.54" (180 mm x 115 mm)	9.80" x 6.04" (248 mm x 153 mm)
<b>Weight</b>	247 g	230 g	380 g	820 g
<b>Digit Height</b>	1.93" / 49 mm	1.43" / 35 mm (GNX20/21)	2.0" / 51 mm	2.8" / 72 mm
<b>Display Size</b>	4.0" / 102 mm	4.0" / 102 mm	6.3" / 159 mm	9.3" / 236 mm
<b>LCD % of Total Size</b>	39%	40%	53%	53%
<b>Number of Big Digits</b>	3	3	4	4
<b>Functions per Page</b>	1 to 4	1 to 3	1 to 3	1 to 3
<b>Total Data Fields</b>	50+	50+	50+	50+
<b>Background Colors</b>	RGB	RGB	RGB	RGB
<b>Sunlight Visible</b>	Yes	Yes	Yes	Yes
<b>Display Update Rate</b>	1 Hz	Up to 8 Hz	Up to 8 Hz	Up to 8 Hz
<b>Operating Temp</b>	5°F to 158°F / -15°C to 70°C	5°F to 158°F / -15°C to 70°C	5°F to 158°F / -15°C to 70°C	5°F to 158°F / -15°C to 70°C
<b>Power Consumption</b>	3 W (Max light)	350 mW (no backlight), 450 mW (no backlight)	360 mW (no backlight), 400 mW (no backlight)	360 mW (no backlight), 400 mW (no backlight)
<b>Voltage Range</b>	9-16 V (from NMEA 2000)	9-16 V (from NMEA 2000)	9-16 V (from NMEA 2000)	9-16 V (from NMEA 2000)

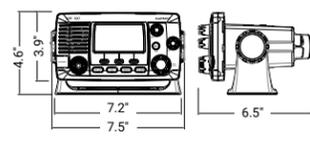
# Instruments

	GHC 50 Autopilot Control	TD 50
		
<b>Dimensions</b>	5.5" x 4.1" x 2.0" (14.0 x 10.5 x 5.1 cm)	5.5" x 4.1" x 2.0" (14.0 x 10.5 x 5.1 cm)
<b>Display Type</b>	800 x 480 WVGA	800 x 480 WVGA
<b>Display Size</b>	5"	5"
<b>Knob Control</b>	With Grid 10/20	With Grid 10/20
<b>Power Consumption (typical LEN)</b>	2.6 W/13	2.6 W/13
<b>Remote Control via ANT</b>	Yes	Yes
<b>Wi-Fi Connectivity</b>	Yes	Yes
<b>Touch Display</b>	Yes	Yes
<b>Sunlight Visible</b>	Yes	Yes
<b>NMEA 2000</b>	Yes	Yes
<b>Operating Temp</b>	5°F to 131°F / -15°C to 55°C	5°F to 131°F / -15°C to 55°C
<b>Ethernet</b>	Yes	Yes

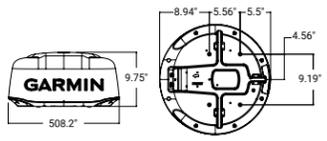
## AIS 800



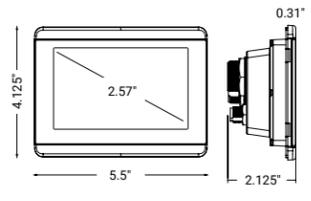
## VHF SERIES



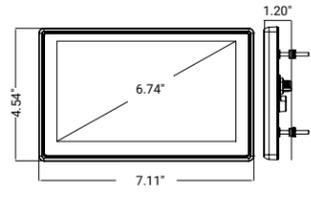
## GMR DOME SERIES



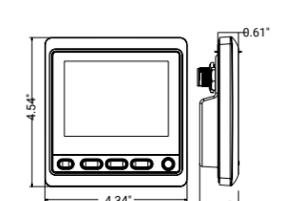
## GHC 50



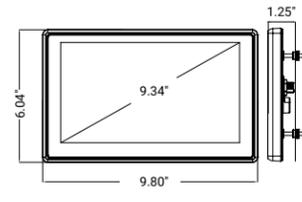
## GNX 120



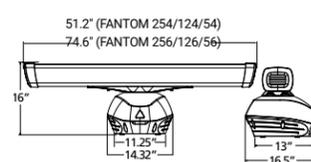
## GMI 20 AND GNX 20/21/WIND



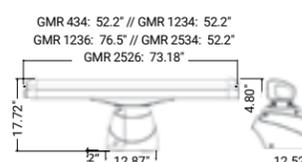
## GNX 130



## GMR FANTOM SERIES



## GMR XHD3 SERIES



# AIS and VHF

	AIS 800	CORTEX M1	VHF 115	VHF 215	VHF 215 AIS	CORTEX V1	VHF 315
							
<b>Display Size, Diagonal</b>			2.5"	3.2"	3.2"	4" Color	2" (GHS 11)
<b>Adjustable Backlighting</b>			Yes	Yes	Yes	Yes	Yes (GHS 11)
<b>Class D DSC with Distress and Position Polling</b>			Yes	Yes	Yes	Yes	Yes
<b>Transmitter Power Output</b>	5 W / 2 W	5 W	25 W / 1 W	25 W / 1 W	25 W / 1 W	25 W / 1 W	25 W / 1 W
<b>Dedicated Channel 16 Button</b>			Yes	Yes	Yes	Yes	Yes (GHS 11)
<b>ATIS Compatible</b>			Yes	Yes	Yes	Yes	Yes
<b>NMEA 2000® Interface</b>	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<b>NMEA 0183® Interface</b>	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<b>Supports Handset</b>		Yes (Cortex H1 & H1P)		Yes (GHS 11)	Yes (GHS 11)	Yes (Cortex H1 & H1P)	Yes, up to 3 (GHS 11), 1 included
<b>Intercom (requires GHS 11)</b>			Yes	Yes	Yes	Yes	Yes
<b>Hailer/Foghorn Compatible</b>		Yes	Yes	Yes	Yes	Yes	Yes
<b>Internal GPS Receiver</b>	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<b>Internal GPS Antenna</b>	Yes		Yes	Yes	Yes		
<b>External GPS Options</b>	Antenna	Antenna	Antenna NMEA 2000 NMEA 0183	Antenna NMEA 2000 NMEA 0183	Antenna NMEA 2000 NMEA 0183	Antenna	Antenna
<b>AIS Receiver</b>	Yes	Yes			Yes	Yes	
<b>AIS Transponder</b>	Class B SOTDMA	Class B SOTDMA			Class B CSTDMA	Class B SOTDMA	
<b>Remote Monitoring</b>		Yes				Yes	
<b>Integral VHF Antenna Splitter</b>	Yes	Yes				Yes	

# Radars

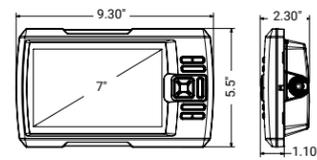
	GMR Fantom 254/256	GMR Fantom 124/126	GMR Fantom 54/56	GMR 2536/1236/436 xHD3 GMR 2534/1234/434 xHD3	GMR Fantom 24x/18x	GMR 24 xHD3/18 xHD3	GMR 18HD3
							
<b>Available in Black</b>	Yes	Yes	Yes	No	Yes	No	No
<b>Transmit Power</b>	250 watts	120 watts	120 watts	25 kW/12 kW/4 kW	40 watts	4 kW	4 kW
<b>Dimensions (diameter)</b>	1928 mm (Fantom 256) 1328 mm (Fantom 254)	1928 mm (Fantom 126) 1328 mm (Fantom 124)	1928 mm (Fantom 56) 1328 mm (Fantom 54)	1938 mm (GMR 2536) 1325 mm (GMR 2534)	645 mm (Fantom 24x) 508 mm (Fantom 18x)	645 mm (24 xHD3) 508 mm (18 xHD3)	508 mm
<b>Rotation Speed (revolutions/min)</b>	24 and 48	24 and 48	24 and 48	24 and 48	24 and 48	Up to 60 rpm, depending on settings	24
<b>Weight</b>	23,6 kg (Fantom 256) 21,3 kg (Fantom 254)	23,6 kg (Fantom 126) 21,3 kg (Fantom 124)	23,6 kg (Fantom 56) 21,3 kg (Fantom 54)	30,4 kg (GMR 2536) 28,4 kg (GMR 2534)	9,5 kg (Fantom 24x) 7,7 kg (Fantom 18x)	8,7 kg (24 xHD3) 7,0 kg (18 xHD3)	7,0 kg
<b>Horizontal Beamwidth</b>	1.25° (Fantom 256) 1.8° (Fantom 254)	1.25° (Fantom 126) 1.8° (Fantom 124)	1.25° (Fantom 56) 1.8° (Fantom 54)	1.1° (GMR 2536) 1.8° (GMR2534)	3.7° (Fantom 24x) 5.2° (Fantom 18x)	3.7° (24 xHD3) 5.2° (18 xHD3)	5.2°
<b>Vertical Beamwidth</b>	23°	23°	23°	23°	25°	25°	25°
<b>Maximum/Minimum Range</b>	96 nautical miles/6 m	96 nautical miles/6 m	72 nautical miles/6 m	96 nm/20 m (2526) 72 nautical miles/20 m (434/436)	48 nautical miles/6 meters	48 nautical miles/20 meters	36 nautical miles/20 meters
<b>Waterproof According to Standard</b>	IPX6	IPX6	IPX6	IPX6	IPX7	IPX7	IPX7
<b>Power Supply</b>	10-32 V	10-32 V	10-32 V	10-32 V	10-32 V	11 - 32V	11 - 32 V
<b>Power Consumption (typical)</b>	80 W	80 W	80 W	70 W (25 kW), 70 W (12 kW), 55 W (4 kW)	18, 1-24.4 W (dependent on range setting)	40 W	40 W
<b>Power Consumption (standby)</b>	10 W	10 W	10 W	18 W	3 W	15 W	15 W
<b>Max Wind Load</b>	80kt	80kt	80kt	12/25kW: 100kt 4kW: 80 knot <sup>1</sup>			
<b>Temperature Range</b>	-15 to 55C	-15 to 55C	-15 to 55C	-15 to 55C	-15 to 55C	-25 to 70C	-25 to 70C
<b>Guard Zone with Alarm</b>	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<b>Cable Length</b>	15 m	15 m	15 m	15 m	15 m	15 m	15 m
<b>Polarization</b>	Horizontal	Horizontal	Horizontal	Horizontal	Horizontal	Horizontal	Horizontal
<b>Trails</b>	Heading-corrected, Adjustable	Heading-corrected, Adjustable	Heading-corrected, Adjustable	True	Heading-corrected, Adjustable	True	No
<b>Dual Range</b>	Yes	Yes	Yes	Yes	Yes	Yes	No

<sup>1</sup>100 knot with optional voltage converter upgrade

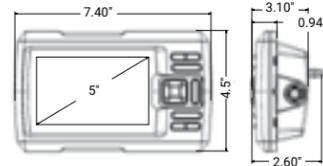
# Fishfinders

	STRIKER Vivid 9sv	STRIKER Vivid 7cv/sv	STRIKER Vivid 5cv	STRIKER Vivid 4cv
				
<b>Display Size (diagonal)</b>	9.0"	7.0"	5.0"	4.0"
<b>Display Resolution</b>	800 x 480 WVGA	800 x 480 WVGA	800 x 480 WVGA	480 x 320 HVGA
<b>Internal High-sensitivity GPS</b>	Yes	Yes	Yes	Yes
<b>Built-in Quickdraw</b>	Yes	Yes	Yes	Yes
<b>Built-in Wi-Fi®</b>	Yes	Yes	No	No
<b>CHIRP Traditional Sonar</b>	Yes	Yes	Yes	Yes
<b>Dual Frequency (50/200 kHz)</b>	Yes	Yes	Yes	Yes
<b>Dual Beam (77/200 kHz)</b>	Yes	Yes	Yes	Yes
<b>CHIRP ClearVü</b>	Yes	Yes (7sv with optional transducer)	Yes	Yes
<b>CHIRP SideVü</b>	Yes	N/A	No	No
<b>Included Transducer</b>	CV52HW-TM (High Wide CHIRP/ClearVü/SideVü)	CV20-TM (CHIRP/ClearVü)	CV20-TM (CHIRP/ClearVü)	CV20-TM (CHIRP/ClearVü)
<b>Transmit Power - Included Transducer</b>	250 W Trad 350 W ClearVü/SideVü	500 W Trad 500 W ClearVü	500 W Trad 500 W ClearVü	300 W Trad 300 W ClearVü
<b>Frequencies Supported (kHz)</b>	High-Wide CHIRP (150-240 kHz) ClearVü/SideVü (455/800 kHz)	CHIRP (77/200 kHz) ClearVü (455/800 kHz)	CHIRP (77/200 kHz) ClearVü (455/800 kHz)	CHIRP 77/200 kHz ClearVü (455/800 kHz)
<b>Maximum Depth Capabilities with Included Transducer¹</b>	800 ft (traditional) 250 ft (ClearVü) 500 ft Left/Right (SideVü)	2,300 ft (traditional) 250 ft (ClearVü)	2,300 ft (traditional) 250 ft (ClearVü)	1,750 ft (traditional) 250 ft (ClearVü)
<b>Waypoints</b>	5,000	5,000	5,000	5,000
<b>Audible Alarms</b>	Yes	Yes	Yes	Yes
<b>User Data Sharing Cable Compatible</b>	Yes	Yes	Yes	Yes
<b>Water Temperature Log/Graph</b>	Yes	Yes	Yes	Yes
<b>GPS Speed</b>	Yes	Yes	Yes	Yes
<b>Flasher</b>	Yes	Yes	Yes	Yes

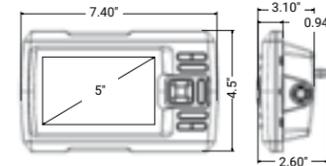
## STRIKER VIVID 9SV



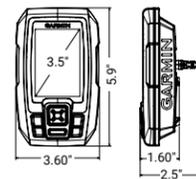
## STRIKER VIVID 7CV/SV



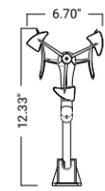
## STRIKER VIVID 5CV



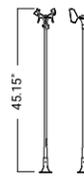
## STRIKER VIVID 4CV



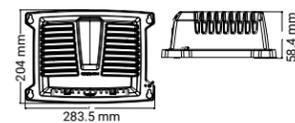
## GWIND/GWIND WIRELESS 2



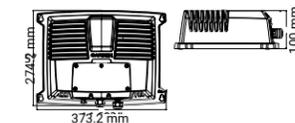
## GWIND RACE



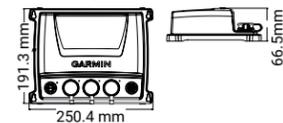
## GSD 24



## GSD 26



## GCV 10 AND GSD 25



# gWind

	gWind Transducer	gWind Race Transducer	gWind Wireless 2 Transducer	GND 10
				
<b>Unit Dimensions, WxHxD</b>	610 x 345 mm	H=45.15"	6.70" x 12.33"	6.73" x 3.58" x 1.97"
<b>Weight</b>	260 g	320 g	350 g	196 g
<b>Cable Length</b>	25 m	25 m	N/A	NMEA 2000 (2m) Nexus network (5m)
<b>Water-resistant</b>	IPX6	IPX6	IPX6	IPX6
<b>Temp Range</b>	From -15°C to 70°C	From -15°C to 70°C	From -15°C to 70°C	From -15°C to 70°C
<b>Voltage Range</b>	9-16 V	9-16 V	N/A	9-16 V
<b>Power Usage</b>	0.33 W	0.33 W	Solar-powered	0.85 W
<b>Compass Safe Distance</b>	N/A	N/A	N/A	0.1m
<b>Accuracy Angle</b>	Better than ±1.5°	Better than ±1.5°	Better than ±1.5°	N/A
<b>Speed</b>	Better than ±3%	Better than ±3%	Better than ±3%	N/A
<b>NMEA 2000® Load Equivalency Number (LEN)</b>	N/A	N/A	N/A	4
<b>Wireless Connectivity</b>	No	No	Yes	No

# Sonar Modules

	GSD 24	GSD 25	GSD 28	GCV 10	GCV 20
					
<b>Physical Size (WxHxD)</b>	275 x 82 x 204 mm	192 x 66 x 251 mm	10.7" x 14.4" x 4.0"	192 x 66 x 251 mm	192 x 66 x 251 mm
<b>White Line</b>	Yes	Yes	Yes	No	No
<b>Water-resistant According to Standard</b>	IPX7	IPX7	IPX7	IPX7	IPX7
<b>Compatible with Dual-frequency Transducers</b>	Yes	Yes	Yes	No	No
<b>Autogain Technology</b>	Yes	Yes	Yes	Yes	Yes
<b>Power Supply</b>	10-35 V	10-35 V	10-32 V	10-35 V	10-35 V
<b>Power Consumption</b>	2-29 W	2-29 W	120 W	10.5 W	10.5 W
<b>Maximum Depth¹</b>	5,000'	ClearVü: 750' SideVü: 500' Traditional: 5,000'	10,000'	ClearVü: 750' SideVü: 500'	ClearVü: 750' SideVü: 500'
<b>Fish Symbol ID</b>	Yes	Yes	Yes	No	No
<b>Frequency</b>	Traditional: 50/200, 77/200, 83/200 kHz	Traditional: 50/200, 77/200, 83/200 kHz Single Channel CHIRP: 40-250 kHz Dual Channel CHIRP: 40-250 kHz SideVü/ClearVü CHIRP: 455/800 kHz CHIRP: 260/455 kHz	Dual Channel CHIRP: 25-250 kHz	SideVü/ClearVü CHIRP: 455/800 kHz CHIRP: 260/455 kHz	SideVü/ClearVü CHIRP: 455/800/1200 kHz
<b>Maximum Transducer Angle Dual Frequency</b>	45/10°	45/10°	45/10°	n/a	n/a
<b>Depth-Controlled Gain</b>	Yes	Yes	Yes	No	No
<b>Output Power</b>	Up to 2 kW	Up to 1 kW	Up to 3 kW	500 W	500 W
<b>Garmin Marine Network Compatible</b>	Yes	Yes	Yes	Yes	Yes
<b>RapidReturn Sonar Technology</b>	No	No	Yes	No	No
<b>xCHIRP Technology</b>	No	No	Yes	No	No

# Cameras

	GC 14	GC 200	GC 100	GC 245	GC 255
					
<b>Video Resolution</b>	976(H) x 582(V)	Up to 1920 x 1080p²	1280 x 720p	Up to 1920 x 1080p²	Up to 1920 x 1080p²
<b>Low-light Vision</b>	Up to 15 meters	Up to 30 meters	Up to 3 meters	•	•
<b>Water Rating</b>	IPX7	IPX7	IPX7	IPX7	IPX7
<b>One-button Start-up</b>			•		
<b>Pair Multiple Cameras</b>		•	•	•	•
<b>Connection to Chartplotter</b>	Composite Video	Garmin Marine Network	Wi-Fi®	Garmin Marine Network or BlueNet™	Garmin Marine Network or BlueNet
<b>Hardwired Power</b>	12 V (9-18 VDC)	12 V (9-18 VDC)	12 V or 24 V	12 V or 24 V	12 V or 24 V
<b>Compass Safe Distance</b>	10" (25.4 cm)	4" (10 cm)	4" (10 cm)	1" (2.54 cm)	1" (2.54 cm)
<b>Operating Temperature</b>	-20 to 60°C (-4 to 140°F)	-20 to 60°C (-4 to 140°F)			
<b>Viewing Angle, HxV(°)</b>	95.0° x 52.0°	99.2° x 74.0°	160° x 90°	160° x 90°	160° x 90°
<b>Weight</b>	6.7 oz (190 g)	18.3 oz (520 g)	1.7 oz (50 g)	3.25 oz (92 g)	22.9 oz (650 g)
<b>Unit Dimensions</b>	2.15" x 2.0" (5.43 x 5.07 cm)	3.4" x 3.1" (8.7 x 7.9 cm)	2.0" x 1.6" x 1.1" (5.0 x 4.0 x 2.8 cm)	2.4" x 2.4" x 2.2" (6.1 x 6.1 x 5.1 cm)	3.2" x 3.2" x 3.3" (8.1 x 8.1 x 8.38 cm)
<b>Power Consumption</b>	90 mA (IR off), 183 mA (IR on)	210 mA (IR Off), 370 mA (IR On)		4.5 W	4.5 W

¹Maximum depth capacity is dependent on water salinity, bottom type and other water conditions • Wi-Fi is a registered trademark of the Wi-Fi Alliance.

¹Maximum depth capacity is dependent on water salinity, bottom type and other water conditions

²1080p resolution available on select chartplotters only

# Handhelds

	GPSMAP 276Cx	GPS 73	GPSMAP 79s/79sc	GPSMAP 86s/86sc/86i/86sci 86	inReach Mini 2 Marine Bundle
					
<b>Number of Waypoints</b>	10,000	1,000	2,000	10,000	1000
<b>Internal Map Memory</b>	8.0 GB	No	1.7 GB	16 GB	No
<b>Number of Routes</b>	250	50	200	250	100
<b>Basemap, Preprogrammed Map</b>	Worldwide basemap	No	Worldwide basemap	BlueChart g3 (86sc, 86sci)	No
<b>Additional Map Options</b>	BlueChart g2, City Navigator, topo, topo 24K	No	BlueChart g2 (78sc), City Navigator, Pro, Pro v2 and Prime outdoor maps	86sci/86i: Up to 35 hours in 10-minute tracking mode; up to 200 hours (expedition mode) 86sci 86sc/86s: Up to 40 hours (standard mode); up to 200 hours (expedition mode)	No
<b>Battery Life</b>	Up to 16 hours (lithium-ion); Up to 8 hours (AA batteries)	18+ hours on 2 AA batteries (not included)	Up to 19 hours on 2 AA batteries (not included); NiMH or lithium recommended	Up to 35 hours at 10-minute tracking; up to 200 hours at 30-minute tracking (power save mode)	Up to 14 days at 10-minute tracking send interval with standard activity recording with full sky view; up to 30 days at 30-minute tracking send interval with standard activity recording with full sky view; up to 1 year when powered off
<b>Display Size</b>	5" diagonal	2.6" diagonal	2.6" diagonal	3" diagonal	1.3" diagonal
<b>Display Type</b>	TFT (Transflective)	TFT (Transflective)	TFT (Transflective)	TFT (Transflective)	Sunlight-readable, monochrome, transflective memory-in-pixel (MIP)
<b>Area Calculation</b>	Yes	Yes	Yes	Yes	No
<b>Display Resolution Pixels (HxW)</b>	800 x 480	160 x 128	240 x 160	240 x 400	176 x 176
<b>Standard GPS Antenna</b>	Internal	Internal	Integral quad helix	Integral quad helix	Integral quad helix
<b>BLUETOOTH®</b>	BLUETOOTH / Wi-Fi®	No	No	No	BLUETOOTH Low Energy & ANT+®
<b>TracBack® Function</b>	Yes	Yes	Yes	Yes	Yes
<b>Number of Track Points</b>	20,000	10,000	10,000	20,000	10,000
<b>Weight</b>	450 g (lithium), 415 g (AA)	232,4 g	218 g	272 g	100 g
<b>Alarm</b>	Yes	Yes	Yes	Yes	No
<b>Waterproof According to Standard</b>	IPX7	IPX7	IPX7	IPX7	IPX7
<b>Physical Size in mm (HxWxD)</b>	191 x 94 x 43	157 x 69 x 30	152 x 66 x 30	177.8 x 69.85 x 43.18	51.7 x 99.0 x 26.1
<b>Separate Serial and USB Interfaces</b>	Yes	Yes	Yes	Yes	No
<b>Storage of Charts</b>	microSD™ memory card	No	microSD™ memory card	microSD™ memory card	No
<b>Backlit Display</b>	Yes	Yes	Yes	Yes	Yes
<b>Input for External Antenna</b>	Yes	No	Yes	Yes	No
<b>WAAS/EGNOS Compatible</b>	Yes	Yes	Yes	Yes	Yes
<b>Integral Electronic Compass</b>	Yes	No	Yes (78s)	Yes	Yes
<b>Integral Barometric Altimeter</b>	Yes	No	Yes (78s)	Yes	No
<b>Automatic Route Calculation</b>	Yes, with City Navigator	No	Yes, with City Navigator	Yes (with optional mapping for detailed roads)	No
<b>Calendar for Hunting/Fishing Times</b>	Yes	Yes	Yes	Yes	No
<b>Solar and Lunar Calendar</b>	Yes	Yes	Yes	Yes	No
<b>Area Waypoints</b>	Yes	Yes	Yes	Yes	No
<b>Tidal Information</b>	Yes	No	Yes	Yes	No
<b>Power Supply (external)</b>	8-36 V	8-36 V	8-36 V	8-36 V	Included USB-C to bare wire: 12V
<b>Waypoint Icons</b>	Yes	Yes	Yes	Yes	Yes
<b>NMEA Compatible</b>	Yes (NMEA 0183)	Yes (NMEA 0183)	Yes (NMEA 0183)	Yes (NMEA 0183)	No
<b>Camera</b>	No	No	No	No	No
<b>Picture Viewer</b>	No	No	Yes	Yes	No
<b>Floata</b>	Yes	Yes	Yes	Yes	No

# Wearables

	Instinct 2S/2 – Surf Edition	Instinct 2S/2 Solar – Surf Edition	MARQ Captain	quatrix 7	quatrix 7 – Pro Edition	quatrix 7X – Solar Edition
						
<b>Lens Material</b>	Chemically Strengthened Glass	Power Glass™	Domed Sapphire Crystal	Corning® Gorilla® Glass DX	Sapphire Crystal	Power Sapphire™
<b>Case Material</b>	Fiber-reinforced polymer	Fiber-reinforced polymer	Grade-5 Titanium	Fiber-reinforced polymer with titanium rear cover	Fiber-reinforced polymer with titanium rear cover	Fiber-reinforced polymer with titanium rear cover
<b>QuickFit® Watch Bands</b>	Yes (20 mm for 2S, 22 mm for 2)	Yes (20 mm for 2S, 22 mm for 2)	Included (22 mm)	Included (22 mm)	Included (22 mm)	Included (26mm)
<b>Water Rating</b>	10 ATM	10 ATM	10 ATM	10 ATM	10 ATM	10 ATM
<b>Touch Screen</b>	No	No	Yes	Yes	Yes	Yes
<b>Display Type</b>	Monochrome, Sunlight-visible, transflective memory-in-pixel (MIP)	Monochrome Sunlight-visible, transflective memory-in-pixel (MIP)	AMOLED (always-on)	Sunlight-visible, transflective memory-in-pixel (MIP)	AMOLED (always-on)	Sunlight-visible, transflective memory-in-pixel (MIP)
<b>Color Display</b>	No	No	Yes	Yes	Yes	Yes
<b>Battery Life</b>	2S: Smartwatch: up to 21 days Battery Saver Watch Mode: up to 50 days GPS: up to 22 hours	2S: Smartwatch: up to 21 days/51 days with solar¹ GPS: up to 22 hours/28 hours with solar²	Smartwatch: up to 16 days GPS: up to 42 hours GPS + Music: up to 10 hours	Smartwatch: up to 16 days (6 days always-on) Battery-saver watch mode: up to 21 days GPS only: up to 42 hours (30 hours always-on)	Smartwatch: up to 16 days (6 days always-on) Battery-saver watch mode: up to 21 days GPS only: up to 42 hours (30 hours always-on)	Smartwatch: up to 28 days/37 days with solar¹ Battery-saver watch mode: up to 90 days/ 1+ year with solar¹ GPS only: up to 89 hours/ 122 hours with solar² Max battery GPS: up to 213 hours/578 hours with solar²
<b>Smart Mode: Activity Tracking, 24/7 Heart Rate (compatible devices) and BLUETOOTH connectivity</b>	2: Smartwatch: up to 28 days Battery-saver watch mode: up to 65 days GPS: up to 30 hours	2: Smartwatch: up to 28 days/ Unlimited with solar¹ GPS: up to 30 hours/48 hours with solar²		Expedition GPS: up to 14 days	Expedition GPS: up to 14 days	Expedition GPS: up to 62 days/ 139 days with solar¹
<b>Built-in LED Flashlight</b>	No	No	No	No	Yes	Yes
<b>Sensors</b>						
<b>GPS/GLONASS/GALILEO</b>	Yes	Yes	Yes	Yes	Yes	Yes
<b>Multifrequency Positioning</b>	No	No	Yes	Yes	Yes	Yes
<b>Health Monitoring</b>						
<b>Wrist-based Heart Rate</b>	Yes	Yes	Yes	Yes	Yes	Yes
<b>Body Battery™ Energy Monitor</b>	Yes	Yes	Yes	Yes	Yes	Yes
<b>Sleep Score and Insights</b>	Yes	Yes	Yes	Yes	Yes	Yes
<b>Health Snapshot</b>	Yes	Yes	Yes	Yes	Yes	Yes
<b>Daily Smart Features</b>						
<b>Connect IQ™</b>	Yes	Yes	Yes	Yes	Yes	Yes
<b>Smart Notifications</b>	Yes	Yes	Yes	Yes	Yes	Yes
<b>Music Storage</b>	No	No	Up to 2,000 songs	Up to 2,000 songs	Up to 2,000 songs	Up to 2,000 songs
<b>Smartphone Compatibility</b>	iPhone, Android	iPhone, Android	iPhone, Android	iPhone, Android	iPhone, Android	iPhone, Android
<b>Garmin Pay™</b>	No	Yes	Yes	Yes	Yes	Yes
<b>Training, Planning and Analysis</b>						
<b>Recovery Time</b>	Yes	Yes	Yes	Yes	Yes	Yes
<b>VO2 Max</b>	Yes	Yes	Yes	Yes	Yes	Yes
<b>Daily Suggested Workouts</b>	Yes	Yes	Yes	Yes	Yes	Yes
<b>Golfing Features</b>						
<b>Preloaded with 43,000+ Courses Worldwide</b>	No	No	Yes	Yes	Yes	Yes
<b>Boating Features</b>						
<b>Available Boating Profiles</b>	No	No	Boat, Sail, Fish, Sail Race	Boat, Sail, Sail Race	Boat, Sail, Sail Race	Boat, Sail, Sail Race
<b>Anchor Alarm</b>	No	No	Yes	Yes	Yes	Yes
<b>Autopilot Control</b>	No	No	Yes (with compatible Garmin Marine device equipment)	Yes (with compatible Garmin Marine device equipment)	Yes (with compatible Garmin Marine device equipment)	Yes (with compatible Garmin Marine device equipment)
<b>Boat Data Streaming</b>	No	No	Yes	Yes	Yes	Yes
<b>Virtual Starting Line</b>	No	No	Yes	Yes	Yes	Yes
<b>Countdown Timer</b>	No	No	Yes	Yes	Yes	Yes
<b>Tack Assist Mode</b>	No	No	Yes	Yes	Yes	Yes
<b>Built-in Barometer and Tide Tables</b>	No	No	Yes (downloadable tides)	Yes (downloadable tides)	Yes (downloadable tides)	Yes (downloadable tides)
<b>Force Trolling Motor Control</b>	No	No	Yes	Yes	Yes	Yes

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¹Assumes all-day wear with 3 hours per day outside in 50,000 lux conditions • ²Assumes use in 50,000 lux conditions • iPhone is a trademark of Apple Inc., registered in the U.S. and other countries • Android is a trademark of Google LLC.

# Autopilot Compatibility

Steering Type	Vessel Size/Type and Overall Use	Recommended Core Pack	Drive Unit Type	Components Included in Core Pack	Required Components not Included in Core Pack
Hydraulic	Premium, recommended option for most hydraulic steering installations, including Verado™, power assist and total cylinder volumes up to 24 cubic inches	Reactor™ 40 Hydraulic Core Pack with SmartPump™ v2	SmartPump v2	Reactor 40 SmartPump v2 Shadow Drive	
Hydraulic	Low-cost option and single-cylinder applications with cylinder volumes from 6 to 14 cubic inches	Reactor 40 Hydraulic Autopilot	GHP 1.2 L Pump	Reactor 40 ECU 10 Shadow Drive GHC 50	010-00705-64: GHP 1.2 L Pump
Hydraulic	Low-cost option for dual-cylinder applications with total cylinder volumes from 10 to 24 cubic inches	Reactor 40 Hydraulic Autopilot	GHP 2.0 L Pump	Reactor 40 ECU 10 Shadow Drive GHC 50	010-00705-63: GHP 2.0 L Pump
Hydraulic	Cruising applications only; for single-engine outboard vessels less than 30' long for cylinder sizes up to 10 cubic inches	Compact Reactor™ 40 with Pump, GHC 20™ and Shadow Drive Technology Pack	1.0 L Pump	Reactor 40 Compact ECU 1.0 L Pump Shadow Drive, GHC 50	
Hydraulic	Cruising applications only; for single-engine outboard vessels less than 30' long for cylinder sizes up to 10 cubic inches	Compact Reactor 40 Hydraulic Autopilot with GHC 20 Pack	1.0 L Pump	Reactor 40 Compact ECU 1.0 L Pump Shadow Drive	
Hydraulic	Cruising applications only; for single-engine outboard vessels less than 30' long for cylinder sizes up to 10 cubic inches	Compact Reactor 40 Hydraulic Autopilot Starter Pack	1.0L Pump	Reactor 40 Compact ECU 1.0 L Pump	
Hydraulic	Hydraulic steering vessels with non-Garmin drive units	Reactor 40 Mechanical/Solenoid/Retrofit Corepack	Third-party Drive Unit	Reactor 40 ECU 12 GHC 50	Third-party drive unit 010-11533-00: actuator motor cable, 010-11829-00: GRF 10 rudder sensor; or 010-11532-00 plus third-party rudder sensor
Mechanical Steering	Total vessel displacements from 48,000 to 79,000 pounds	Reactor 40 Mechanical/Solenoid/Retrofit Core Pack	Class B Linear Actuator	Reactor 40 ECU 12 GHC 50	010-11573-00: Class B linear actuator; has rudder feedback included
Mechanical Steering	Total vessel displacements up to 48,400 pounds	Reactor 40 Mechanical/Solenoid/Retrofit Core Pack	Class B Compact Linear Actuator	Reactor 40 ECU 12 GHC 50	010-12029-01: Class B linear actuator; has rudder feedback included
Mechanical Steering	Total vessel displacements up to 28,500 pounds, with very low backdrive force required	Reactor 40 Mechanical/Solenoid/Retrofit Core Pack	Class A Linear Actuator	Reactor 40 ECU 12 GHC 50	010-11572-00: Class A linear actuator; has rudder feedback included
Mechanical Steering	Sailboats with non-Garmin drive units	Reactor 40 Mechanical/Solenoid/Retrofit Core Pack	Third-party Drive Unit	Reactor 40 ECU 12 GHC 50	Third-party drive unit 010-11533-00: actuator motor cable, 010-11829-00: GRF 10 rudder sensor; or 010-11532-00 plus third-party rudder sensor
Steer by Wire	SeaStar Optimus	Reactor 40 Steer-by-wire Standard Core Pack		Reactor 40 GHC 50	
Steer by Wire	ZF Pod Drive	Reactor 40 Steer-by-wire Standard Core Pack		Reactor 40 GHC 50	
Steer by Wire	YANMAR	Reactor 40 Steer-by-wire Standard Core Pack		Reactor 40 GHC 50	
Steer by Wire	Yamaha Helm Master®	Reactor 40 Steer-by-wire Core Pack for Yamaha Helm Master	Gateway Included	Reactor 40 Autopilot Gateway GHC 50	
Steer by Wire	Volvo IPS or Sterndrive	Reactor 40 Steer-by-wire Core Pack for Volvo-Penta	Gateway Included	Reactor 40 Autopilot Gateway GHC 50	
Steer by Wire	Viking® Viper™	Reactor 40 Steer-by-wire Core Pack for Viking Viper		Reactor 40 GHC 50	
Solenoid	Constant running hydraulic pump systems with solenoid autopilot control	Reactor 40 Mechanical/Solenoid/Retrofit Core Pack	Third-party Solenoid Required	Reactor 40 ECU 12 GHC 50	010-11533-10: solenoid cable 010-11829-00: GRF 10 rudder sensor or 010-11532-00 plus third-party rudder sensor
Cable Steer	Most cable-steered vessels	Reactor 40 Mechanical/Solenoid/Retrofit Core Pack	Third-party 12VDC Brushed Motor Actuator Required	Reactor 40 ECU 12 GHC 50	010-11533-10: solenoid cable 010-11829-00: GRF 10 rudder sensor or 010-11532-00 plus third-party rudder sensor
Auxiliary Gas Engine (Kicker)	<20 HP auxiliary gas engines from most major manufacturers	Reactor 40 Kicker	Steering Actuator Included	CCU, ECU, Steering Actuator Throttle Actuator Wireless Remote	







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