

# Z

2022 MARINE CATALOGUE

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# **GARMIN**®

AT GARMIN WE STRIVE TO MAKE THE BEST PRODUCTS FOR EVERYTHING YOU DO ON THE WATER. THESE BRANDS ARE PART OF THE GARMIN FAMILY BECAUSE THEY REPRESENT THE STRONGEST AND BEST OF WHAT THEY DO.

#### **BRAND FAMILY**



#### MARINE ENTERTAINMENT

FUSION® ENTERTAINMENT IS WORLD-RENOWNED FOR ENGINEERING INNOVATIVE AUDIO SOLUTIONS THAT ARE ENJOYED AROUND THE GLOBE BY THE MOST PRESTIGIOUS BOAT DESIGNERS AND MANUFACTURERS.

# **NAVIONICS**

A Garmin Brand

#### CARTOGRAPHY

NAVIONICS® PROVIDES DETAILED MARINE CHARTS AND LAKE MAPS FOR MOST CHARTPLOTTERS, BOTH THROUGH ITS OWN BRANDED PRODUCTS AND WITHIN GARMIN NAVIONICS+\*\* AND PREMIUM GARMIN NAVIONICS VISION+\*\* CARTOGRAPHY FOR GARMIN DEVICES.



#### DIGITAL SWITCHING

EMPIRBUS ™ BRINGS ALL THE POWER AND CONVENIENCE OF ADVANCED HOME AUTOMATION TO YOUR VESSEL, ALLOWING YOU TO CONTROL AND MONITOR ALL ONBOARD ELECTRONIC SYSTEMS FROM YOUR GARMIN CHARTPLOTTER OR MFD.



#### VHF AND SMARTAIS TECHNOLOGY

WITH ALMOST 15 YEARS OF EXPERIENCE, VESPER "HAS DEVELOPED A SUITE OF COMMUNICATION PRODUCTS AND SOLUTIONS FOR POWER, SAIL AND WORKBOATS, INCLUDING THE AWARD-WINNING CORTEX® SYSTEM. CORTEX COMBINES A STATE-OF-THE-ART VHF RADIO WITH VESPER'S UNIQUE SMARTAIS® TRANSPONDER AND REMOTE VESSEL MONITORING TECHNOLOGY.



# LIVESCOPE PLUS

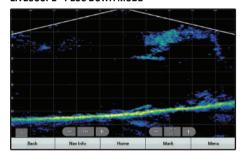


The best of the best just got better with the LiveScope Plus System. Offering improved resolution, reduced noise, clearer images and better target separation, it features built-in stabilization to keep the sonar image steady on your compatible chartplotter, even in rough conditions. Now it's easier than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

Part no: 010-02706-00 Panoptix LiveScope Plus System w/ LVS34 and GLS10

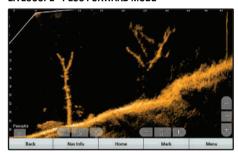
#### THREE MODES IN ONE TRANSDUCER

#### LIVESCOPE™ PLUS DOWN MODE



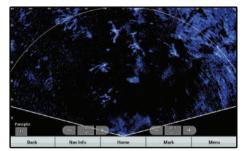
View live, easy-to-interpret scanning sonar images of structure and swimming fish in incredible detail below your boat.

#### 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

010-02706-00 Panoptix LiveScope Plus System w/ LVS34 and GLS10 010-02706-10 LiveScope Plus LVS34, Transducer only



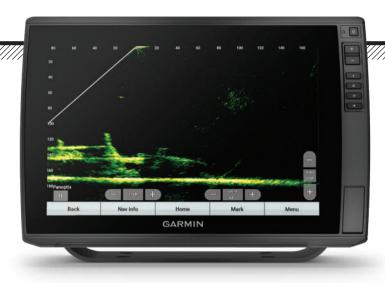


Includes a compact GLS 10 sonar black box with LVS34 transducer and simple plug-andplay Garmin Marine Network connector to install easily and integrate seamlessly with your compatible Garmin chartplotter<sup>1</sup>. With support for Forward, Down and Perspective mode views, now it's easier than ever 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.

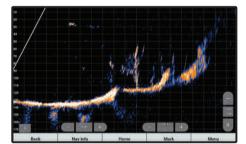
# LIVESCOPE™ XR SYSTEM

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.

Part no: 010-02719-00 Panoptix LiveScope XR System w/LVS62XR and GLS10

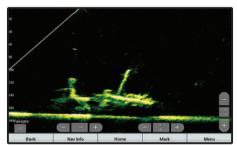


#### LOOK DEEPER



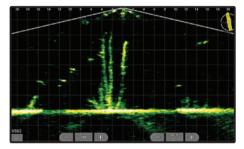
Explore the deep with extended-range, live-scanning sonar depths up to 650' in three modes.

#### TAKE A CLOSE VIEW



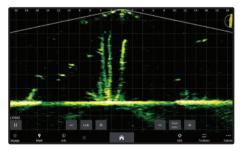
Find fish circling close to your boat. Compress range gives you clear views of waters around your hull.

#### **IMAGE STABILIZATION**



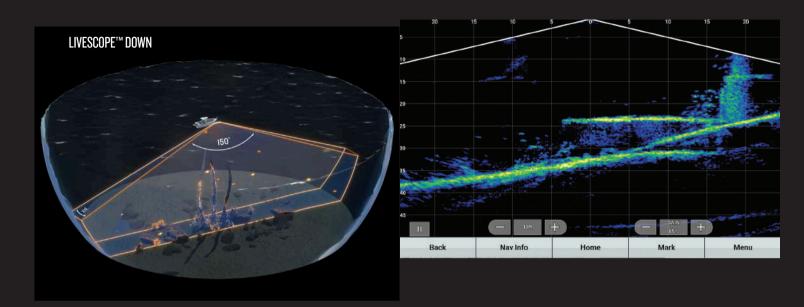
A built-in stabilization system keeps the sonar image steady on your compatible chartplotter, even in rough conditions.

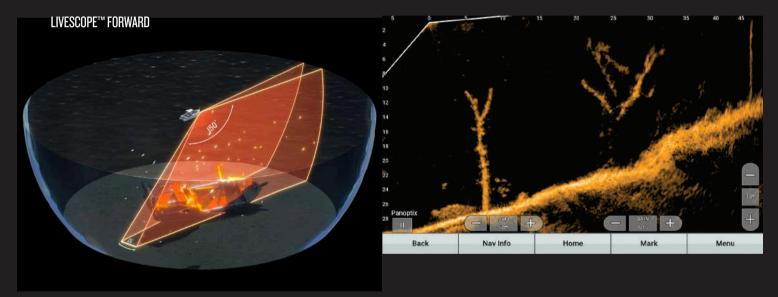
#### **VIVID COLOR PALETTES**

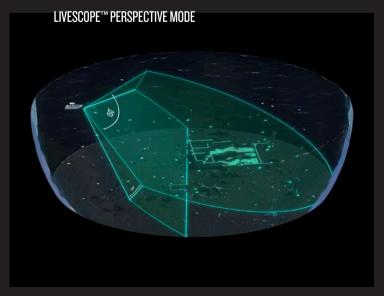


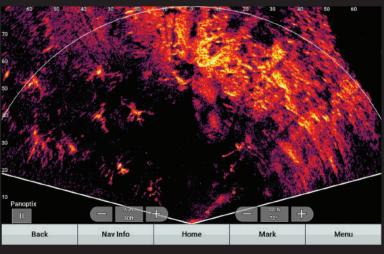
Choose from seven vivid color options to see fish and structure with maximum contrast and clarity.











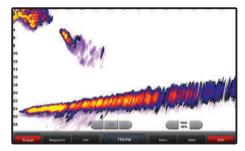
# PANOPTIX ALL-SEEING SONAR

Panoptix sonar is opening up a new world for serious fishermen. 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

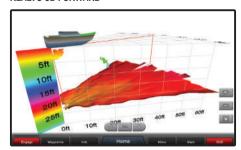
Includes 3 forward views: LiveVü Forward, RealVü 3D Forward and FrontVü1.

#### 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.

#### FRONTVÜ

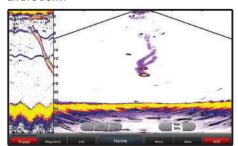


To help give you time to avoid collisions with submerged obstacles, FrontVü shows underwater obstructions within a 300-foot range as you approach them in real time<sup>2</sup>.

#### PANOPTIX DOWN

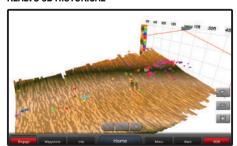
Includes 3 downward views: LiveVü Down, RealVü 3D Historical, and RealVü 3D Down.

#### 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 of 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.

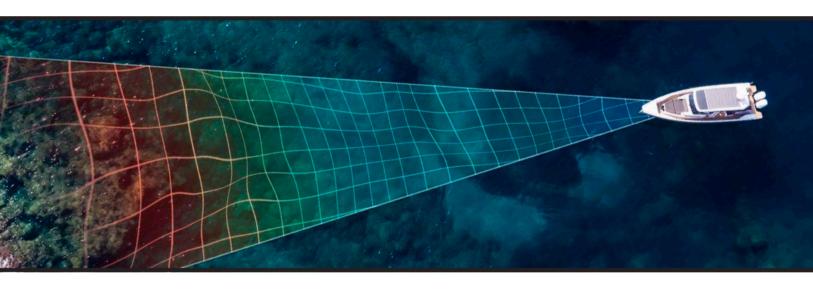
# PANOPTIX ALL-SEEING SONAR

#### PANOPTIX FRONTVÜ SONAR

Part no: PS51-TH: 010-01753-00



Multibeam thru-hull transducer with premium FrontVü forward-looking sonar helps you avoid running aground¹ by displaying the bottom ahead of your boat in real time on your chartplotter. It also includes LiveVü Forward sonar to give you the unique ability to see fish — even divers — swimming in real time under and ahead of your boat with a 300-foot forward range.



THE LINCHE							
THE LINEUP	<b>PS21-TM</b> 010-01588-01	<b>PS22-TR</b> 010-01945-00	<b>PS30</b> 010-01284-00	<b>PS31</b> 010-01284-01	<b>PS51-TH</b> 010-01753-00	<b>PS60</b> 010-01406-00	
RealVü 3D Down			•			•	
RealVü 3D Historical			•			•	
LiveVü Down		•	•			•	
RealVü 3D Forward				•			
LiveVü Forward	•	•		•	•		
FrontVü Forward	•	•		•	•		
Independent Power Connection	•	•	•	•	•	•	
Transom Mount Included	•2		•	•2			
Trolling Motor Mount Included		•		•			
Thru-Hull Mount and Fairing Block					•	•	

<sup>&</sup>lt;sup>1</sup> The ability to effectively avoid running aground with FrontVü sonar decreases as speed rises above 8 knots

#### SCANNING SONAR SYSTEM

# **ULTRA HIGH-DEFINITION**

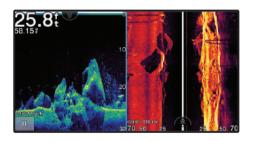


The Ultra High-Definition Scanning Sonar redefines scanning sonar. See everything below and off to the sides of your boat in amazingly sharp, crisp detail. The UHD transducers provides image details so clear and precise, you can actually see fish hanging just off branches of submerged trees, brush and rocks. You can see size differences between bigger and smaller fish and even see individual fish swimming in bait balls.

Share Ultra High- Definition scanning sonar images seamlessly across multiple networked chartplotters1. You can also add optional Panoptix all-seeing sonar to your networked sonars.

#### 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.

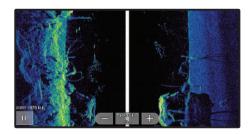


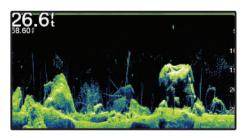


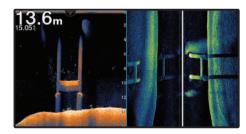


#### **VIVID COLOR PALETTE**

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



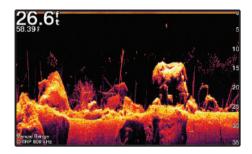


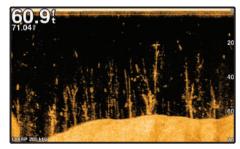


# **ULTRA HIGH-DEFINITION**

#### **UHD CLEARVÜ**

ClearVü with CHIRP technology 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.



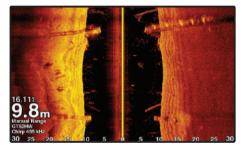


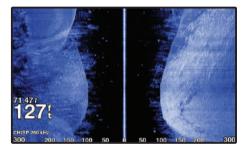


#### **UHD SIDEVÜ**

SideVü with CHIRP technology 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.

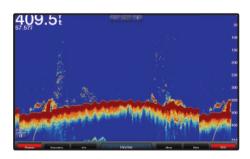


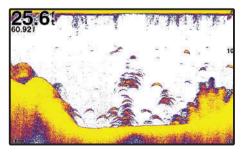


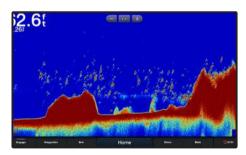


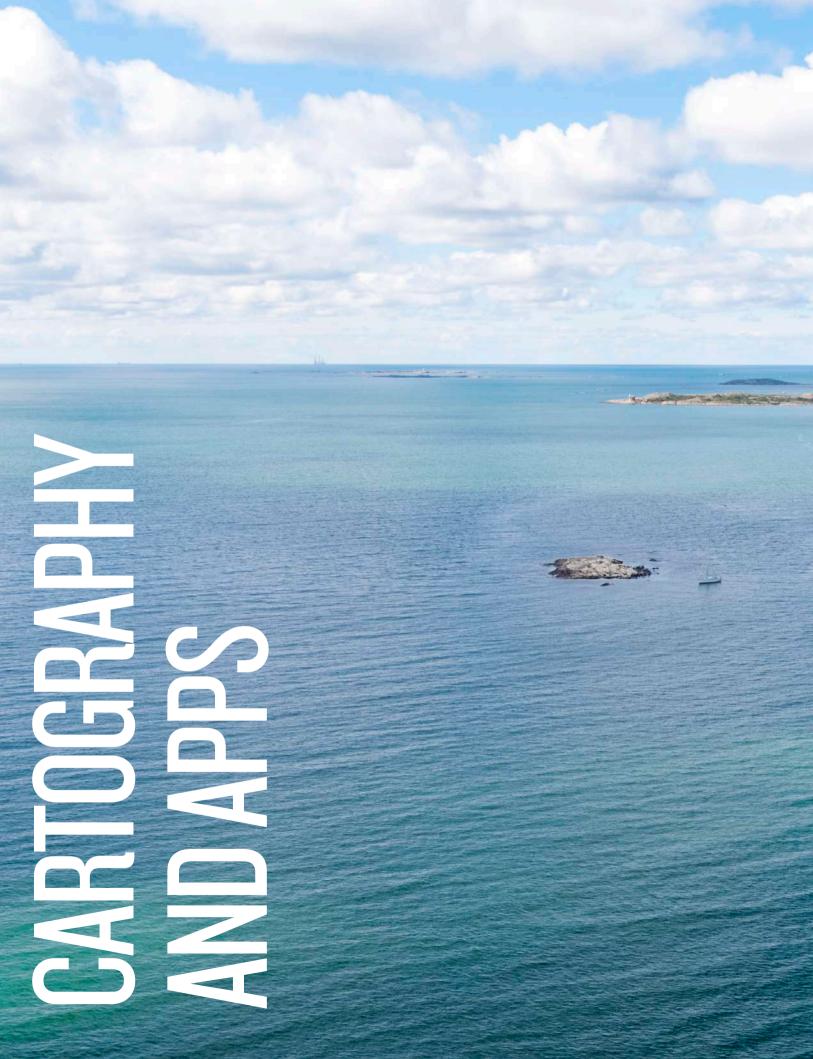
#### TRADITIONAL CHIRP SONAR

Garmin CHIRP traditional 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.











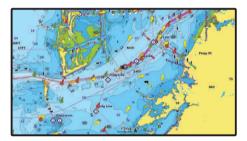
## GARMIN NAVIONICS+™ CHARTS

Worlwide coverage available

#### INTEGRATED MAPPING FOR GARMIN CHARTPLOTTERS

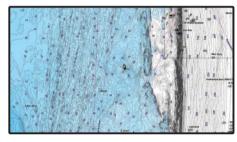
You haven't seen Garmin cartography like this before. With integrated Garmin and Navionics content, it renders a whole new look and feel on your chartplotter<sup>1</sup>, with a vibrant color palette and popular Navionics style chart presentation. For offshore or inland waters, this all-in-one solution 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.

#### ADVANCED CHART DETAIL



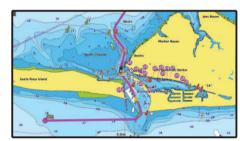
Integrated Garmin and Navionics content, with an updated color palette and Navionics style appearance, offers exceptional coverage, clarity and detail on your chartplotter.

#### **DETAILED CONTOURS**



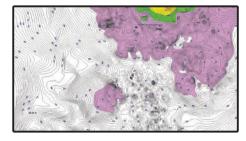
Up to 1' contours provide a more accurate depiction of bottom structure, so you can catch more fish and navigate with confidence.

#### **AUTO GUIDANCE+**



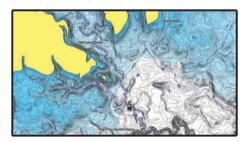
Built-in Auto Guidance+ technology¹ uses your desired depth and overhead clearance, along with chart data and frequently traveled routes, to calculate a suggested path to follow from dock to dock. This results in smoother, more detailed routes, and it now calculates even faster.

#### DEPTH RANGE SHADING



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

#### SHALLOW WATER SHADING



Shallow water shading for a user-defined depth gives a clearer picture of shallow waters to avoid when navigating.

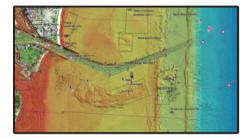
# GARMIN NAVIONICS VISION+ CHARTS

Worlwide coverage available

#### PREMIUM MAPPING FOR GARMIN CHARTPLOTTERS

Our premium cartography 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 onscreen aids as high-resolution relief shading, 3-D 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.

#### RELIEF SHADING



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

#### HIGH-RESOLUTION SATELLITE IMAGERY



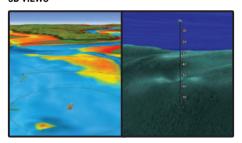
High-resolution satellite imagery overlaid with navigational charts gives you a realistic view of your surroundings — ideal for entering unfamiliar harbors or ports

#### **AERIAL PHOTOGRAPHY**



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

#### 3D VIEWS

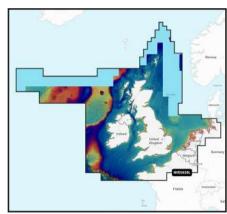


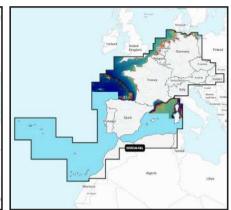
MarinerEye and FishEye views provide 3-D representations of the surrounding area above and below the waterline.

### GARMIN NAVIONICS+™ & GARMIN NAVIONICS VISION+™

#### LARGE COVER AREAS

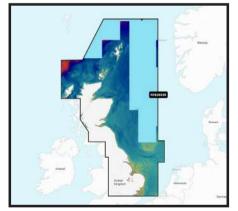
UK, Ireland & Holland	Europe - Central & West	
EU628L	EU646L	

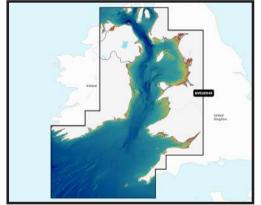


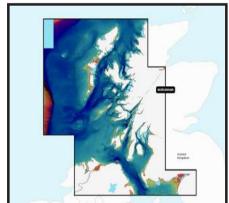


#### **REGULAR COVER AREAS**

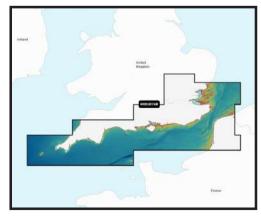
Great Britain, Northeast Coast	Irish Sea	Scotland, West Coast	UK & Ireland Lakes & Rivers	England, South Coast	Irland, West Coast
EU003R	EU004R	EU006R	EU072R	EU074R	EU075R

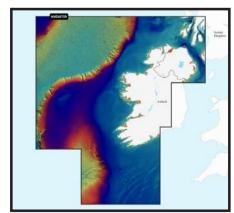












For more information and world wide coverages, please visit www.garmin.com



# NAVIONICS\*+ CHARTS

**NAVIONICS** 

Worldwide coverage available

#### INTEGRATED MAPPING FOR THE WIDEST RANGE OF CHARTPLOTTERS

It's all about knowing your way on the water — with cartography you can trust. That's why the boaters who trust and rely on the Navionics brand have made it the world's No. 1 marine mapping provider¹. Seamlessly combining offshore and inland content, this all-in-one solution offers clear, reliable cartography for the widest range of chartplotter brands. Navionics+ and Platinum+ cartography is available on microSD™ cards for easy installation on your compatible marine device.

Start out from day one with up-to-date charts. An included one-year subscription provides access to daily updates, advanced features and so much more. Plus, all new coverage areas are aligned across standard and premium products, with combined coastal and lake content, making it easier to choose the right mapping solution for your needs.

The same detailed marine and lake charts are also available with the Navionics Boating app on your compatible Apple® or Android™ mobile device. Simply download the app and purchase your charts of choice to access top-of-the-line maps right from your phone.

#### **NAVIONICS+**

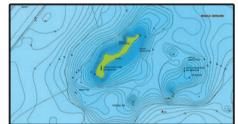
For offshore or inland waters, this all-in-one solution offers detail-rich integrated mapping, up to 1' (0.5 meter) HD contours, advanced features<sup>2</sup> such as dock-to-dock route guidance technology<sup>2</sup> and access to daily updates via the Navionics Chart Installer software.

#### NAUTICAL CHART



Essential cartographic 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' (0.5 meter) contours for a more detailed depiction of bottom

#### **COMMUNITY EDITS**



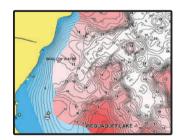
Download the Community Edits content layer to any Navionics card and view this valuable local information, contributed by Navionics Boating app users, on your compatible chartplotter.

#### DOCK-TO-DOCK ROUTE GUIDANCE



Navionics advanced route guidance technology<sup>3</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



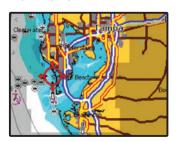
Create your own maps on the fly. Watch new up to 1' (0.5 meter) HD bathymetry maps develop in real time as your boat moves along the water.

#### 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.

#### PLOTTER SYNC



Transfer routes and markers, update charts and more between your plotter card and mobile app — wirelessly. You can even activate or renew your card's subscription and upload sonar logs.

# PLATINUM+ CHARTS

**NAVIONICS** 

#### PLATINUM+ OVERLAYS AND FEATURES

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

#### PLATINUM+

#### INTEGRATED COASTAL AND INLAND LAKES COVERAGE

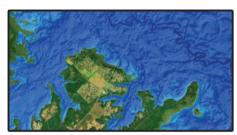
A comprehensive, all-in-one map solution, Platinum+ cartography combines premium marine content on oceans, major rivers and seas with freshwater inland mapping for more than 42,000 lakes worldwide.

#### HIGH-RESOLUTION RELIEF SHADING



The relief shading feature brings bottom detail to life, from shallow flats to deep offshore canyons, in a vivid, colorful representation that helps boaters gain a better understanding of bottom topography.

#### SATELLITE IMAGERY WITH SONARCHART™ SHADING OVERLAY



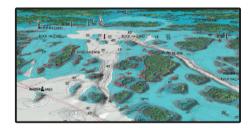
Created from SonarChart 1' contour data, varying shades of blue reveal changes in depth such as channels and drop-offs to improve situational awareness and give clear, visual cues to fish-holding structure

#### **AERIAL PHOTOGRAPHY**



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

#### 3D VIEW

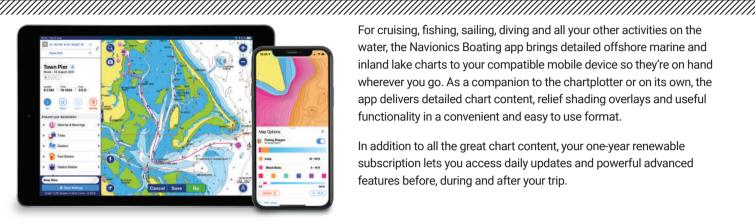


Unique 3D views provide additional perspective, both above and below the water.



# NAVIONICS® BOATING APP

#### **NAVIONICS**



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 compatible 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, relief shading overlays and useful functionality in a convenient and easy to use format.

In addition to all the great chart content, your one-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 overlays use color and shadow to provide boat owners with a better understanding of bottom topography for improved fishing and diving

Auto Guidance+ technology uses your desired depth and overhead clearance, along with chart data and navigation aids, to give you a suggested dock-to-dock path to follow1

The Connections feature keeps you in touch with your friends and fellow boaters; and allows you to share your live location and tracks, routes and markers

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

SonarChart™ Live mapping feature lets you create your own 1'/0.5 meter 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 Boating app is available as a separate purchase for Apple® and Android™ devices and offers a free trial before subscribing



# **ACTIVECAPTAIN® APP**



Give yourself the advantages of the ultimate connected boating experience. Download the free all-in-one ActiveCaptain app. It provides you with a powerful connection to your Garmin chartplotter, charts, maps and the community. Wherever you are, you can have convenient access to your cartography, 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 charts from your mobile phone directly to your chartplotter

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

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

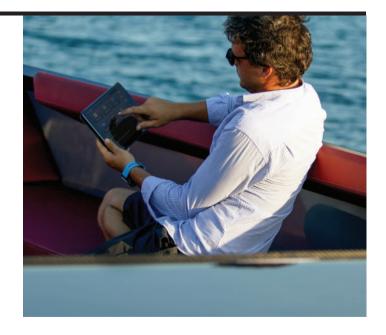
Connect to fellow boaters with the ActiveCaptain community for up-to-date feedback on marinas and other points of interest

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

View and control your chartplotter from your smartphone or tablet<sup>2</sup>

Use with the OnDeck™ remote connectivity system to track, monitor and control up to 5 switches on your boat from virtually anywhere





# **BLUECHART** CHARTS

Worldwide coverage available NAVIONICS

#### **BLUECHART®** G3

Experience unparalleled coverage and brilliant detail when you're on the water. BlueChart g3 coastal charts provide exceptional coverage, clarity and detail with integrated Garmin and Navionics content. The charts also display suggested routes with Auto Guidance1.

#### ADVANCED CHART DETAIL



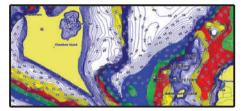
Highly detailed charts with Navionics data help mariners guide their boats in and out of port with confidence.

#### **DETAILED CONTOURS**



Up to 1' contours provide a more accurate depiction of bottom structure for improved fishing charts and enhanced detail in swamps, canals and port plans.

#### **DEPTH RANGE SHADING**



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

#### **AUTO GUIDANCE**

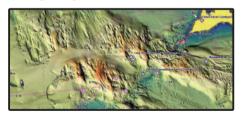


Auto Guidance<sup>1</sup> technology calculates a suggested route to your destination.

#### **BLUECHART® G3 VISION**

BlueChart g3 Vision is our premium chart offering, which includes all the reliability, functionality and integrated Garmin and Navionics® content of BlueChart g3 while adding even more exceptional features such as high-resolution relief shading to help you along your journeys.

#### RELIEF SHADING



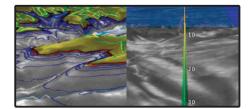
Highly detailed shading combines color and shadow to provide an easy-to-interpret, clearer view of bottom structure than contour lines alone.

#### **AERIAL PHOTOGRAPHY**



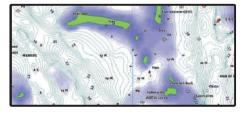
Pictures show exceptional detail of many ports, harbors and marinas. This is ideal when entering unfamiliar areas.

#### 3D VIEWS



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

#### SHALLOW WATER SHADING

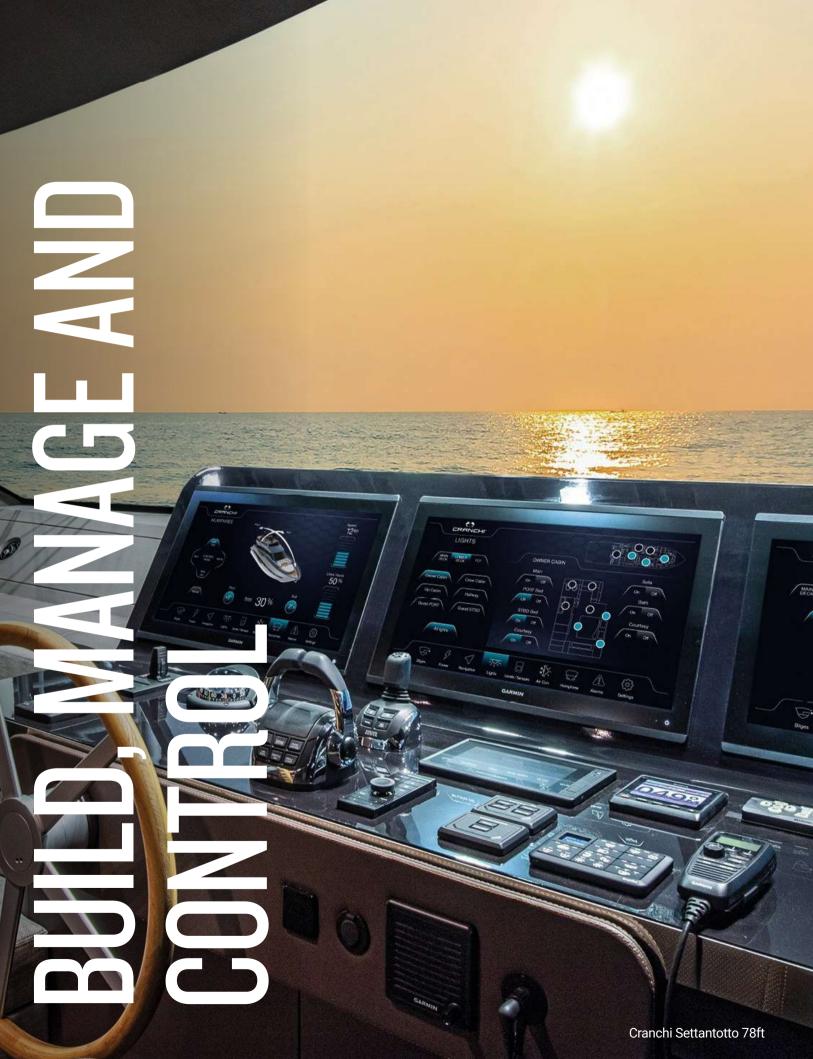


Shallow water shading for a user-defined depth gives a clear picture of shallow waters to avoid.

#### HIGH-RESOLUTION SATELLITE IMAGERY



High-resolution satellite imagery overlaid onto navigational charts provides a realistic view of your surroundings.



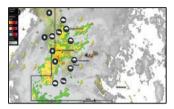
#### **BUILD A COMPLETE ONBOARD SYSTEM**

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-Link™ enabled audio systems, AIS, VHF, autopilots, engine data, fuel flow sensors and wind sensors.

#### WEATHER



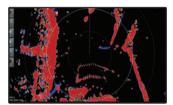
#### **CAMERA**



#### GARMIN MARINF NFTWORK

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

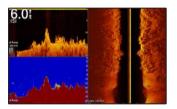
#### RADAR



#### FUSION-LINK



#### **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

When paired with the ActiveCaptain® app on your smartphone, the OnDeck remote connectivity solution lets you track, monitor and control up to 5 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 geofenced area. Get 24/7 peace of mind with OnDeck technology onboard¹.



#### DIGITAL SWITCHING / EMPIRBUS

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 allow cruisers, sailors and anglers to easily control virtually any device on their vessel – from propulsion to pumps, air conditioning to infotainment. This connectivity enhances situational awareness and helps make time on the water even more enjoyable.





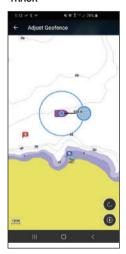
# REMOTE CONNECTIVITY SOLUTIONS

#### ONDECK™ SYSTEM

Part no: 010-02134-00

When paired with the ActiveCaptain® app on your 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 onboard¹.

#### 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.

#### **ACTIVECAPTAIN APP**



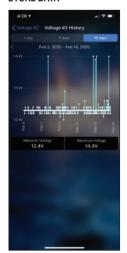
Download the ActiveCaptain app to your compatible smartphone or tablet to manage your vessel. It's where you can set up alarm notifications, take control of your boat and so much more<sup>1</sup>.

#### **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.

#### STORE DATA



Securely collect vessel data with the GTB 10 OnDeck Hub and store it in the cloud for up to 30 days.

#### CONTROL



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

#### ONDECK HUB



The GTB 10 hub uses 3G/4G coverage.



#### **GARMIN BOAT SWITCH**

Get the integrated-boat experience with digital switching that allows you to operate onboard electrical functions right from your compatible GPSMAP® or ECHOMAP™ chartplotter. Control your nav lights, dimmable cabin lights, bilge and livewell pumps, and even your horn. The system installs without special tools and allows you to easily add and name switches on your chartplotter display.



#### ALL-IN-ONE



Replace existing two-element systems — fuse box and switches — for easier control and operation of onboard functions.

#### DIGITAL CONTROL



Get control and protection of up to 20 circuits via your chartplotter rather than a physical button or switch.

#### **ON-OFF SWITCHES**



The toggle outputs operate bilge pump and nondimmable lights, such as nav lights and courtesy lights.

#### DIMMABLE OUTPUTS



Press-and-hold dimmers let you set your preferred brightness on board.

#### MOMENTARY OUTPUTS



Control horns and more. Simply press and release for desired length of horn beep.

#### MONITOR TANKS



Access built-in tank sender detection and calibration for as many as four tanks, such as fuel, freshwater, graywater, blackwater and livewell.

#### LIVEWELL TIMER



A built-in timer turns the pump to cycle the water to keep fish alive — and keep pumps functioning longer.



EmpirBus<sup>™</sup>

EmpirBus brings all the power and convenience of advanced home automation to your vessel by allowing you to control and monitor all onboard electronic systems from your Garmin chartplotter or multifunction display: lighting, wipers, entertainment and security systems, air-conditioning, navigation lights and much more. EmpirBus replaces the standard mechanical circuit breakers and switches with state-of-the-art digital power distribution that provides reliable, convenient and easy-to-use operation.

#### **ELEGANTLY SEAMLESS**

An EmpirBus digital switching system comprises one or more compact digital distribution control modules (DCM) and master control units (MCU). The DCM supports between 16 and 31 circuits that are customized to meet the exact needs of the equipment being controlled. Each DCM connects to the existing NMEA 2000® network backbone, enabling it to communicate with the other DCMs and Garmin multifunctional displays via a WDU unit on the Garmin Marine Network. This flexible network architecture enables the DCMs to be mounted near the equipment they are controlling, providing a system that is simpler to install and troubleshoot. The MCU is the central processor that drives the system, providing computing power, intelligence and decision making. It talks to the other system components via the network.

#### **CREATIVITY UNBOUND**



EmpirBus systems feature fully customizable layouts and graphics that allow for every circuit switch or monitor to be shown in any configuration with a simple drag-and-drop graphic interface builder. Screens can even be personalized by uploading boat images.

#### USER INTERFACE FOR COMPATIBLE GARMIN CHARTPLOTTERS







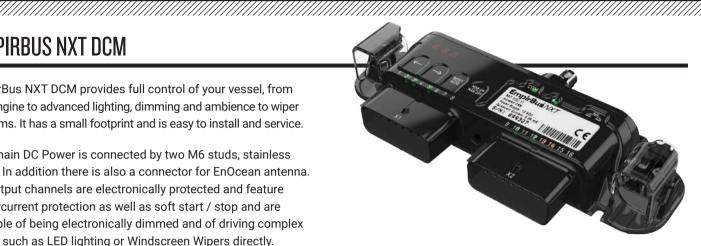
**EmpirBus** 

#### EMPIRBUS NXT DCM

EmpirBus NXT DCM provides full control of your vessel, from the engine to advanced lighting, dimming and ambience to wiper systems. It has a small footprint and is easy to install and service.

The main DC Power is connected by two M6 studs, stainless steel. In addition there is also a connector for EnOcean antenna. All output channels are electronically protected and feature undercurrent protection as well as soft start / stop and are capable of being electronically dimmed and of driving complex loads such as LED lighting or Windscreen Wipers directly.

To increase output capacity outputs may be paralleled and to simplify installations both High Side and Low Side switching is possible.



With multiple input capabilities and ranges the DCM is an extremely versatile and cost effective means to interface signals to the system and when combined with the powerful NXT software complex monitoring and control systems are easily realized in practice.

#### **EMPIRBUS CONNECT 50**

EmpirBus Connect 50 is a more compact version of the NXT DCM, designed for smaller or less complex installations. It includes the durability and competence of the NXT DCM and delivers outstanding cost/channel ratio without sacrificing important functionality.

The outputs have been fitted with high accuracy current feedback that enables real time readout of the current consumption per channel. A new design of the NMEA connection provides galvanically isolated connection, without the need for a powered NMEA bus. The power consumption from the NMEA bus is ZERO for the Connect 50!

The Connect 50 comes as standard with 11 input channels and 20 output channels. As an option it can be equipped with ports



for additional galvanic isolated CAN and serial interface. In addition there is also an option to fit the Connect 50 with WiFi for wireless control and connectivity.

Reverse polarity on two channels to control of tables, windows, hatches etc. is supplied as standard as well as capability of controlling and synchronizing window wipers.

EmpirBus<sup>™</sup>

#### EMPIRBUS NXT MASTER CONTROL UNIT (MCU)

The NXT Master Control Unit is an essential component of a NXT installation and provides multiple functions. It is the central processor that drives the system, provides the computing power, intelligence and decision making. In addition there are various interfaces for connection to external devices.

The master Control Unit (MCU) is a NMEA 2000 device and talks to all of the other system components via the NMEA2000 network. The MCU both stores and executes the configuration files for the installation holding data for every EmpirBus unit present. Should any unit or membrane panel need to be replaced it is the MCU that distributes the specific data to the replacement. The base address of the new component has been entered. Standard Microsoft drivers are utilised for connecting the MCU to the PC, no drivers required. The GSM interface provides possibilities for interaction with the system utilizing SMS. A three-digit display provides displaying parameters and messages. Touch buttons allow new settings to be entered. The GSM interface provides possibilities for nteraction with the system utilizing SMS. A three-digit display provides displaying parameters and messages. Touch buttons allow new settings to be entered.

#### **TD 50 MARINE INSTRUMENT**

The TD50 is a 5" touchscreen display intended for use as a secondary EmpirBus digital switching unit. EmpirBus allows you to control onboard electrical and electronic systems like lighting, air-conditioning, navigation lights, wipers, horns, entertainment systems, security systems and much more. The TD50 has configurable backlight and language capabilities. Its software can be updated by MFD or ethernet Garmin card reader.



#### **EMPIRBUS WEB DISPLAY UNIT (WDU V2)**

The EmpirBus Web Display (WDU) unit is a webserver unit to distribute customized graphics to any HTML5-supporting device. The WDU allows any EmpirBus system to be controlled and monitored by a user interface fully optimized for its purpose.

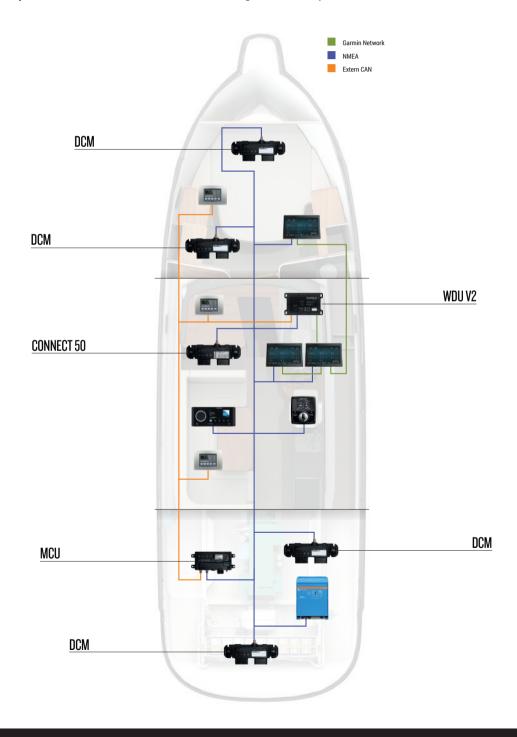
The WDU is an EmpirBus system add-on to enable control from HTML5-supporting devices and software. NMEA2000 connected to EmpirBus system and Ethernet (RJ45 sealed) for HTML5 distribution. HTML5 pages and apps can be graphically configured without limitations and work seamlessly with the EmpirBus software.



# SYSTEM CONFIGURATION

**EmpirBus** 

Control all electronic and electrical systems from a compatible Garmin display, replacing standard mechanical circuit breakers and switches with a state-of-the-art digital power distribution. Simple, easy to use, cost-effective and with seamless, reliable operation, EmpirBus digital switching makes a perfect solution to centralize all controls. Enjoy full control of your boat along with marine specific monitoring solutions like battery levels, lighting, trim controls, temperature, tank monitoring and more. The EmpirBus interface can be easily customized for each boat model, resulting in intuitive operation.



# 



## FUSION® MARINE ENTERTAINMENT





## THE FUTURE WITH FUSION

Fusion, a Garmin brand, is passionate about enhancing your time on the water. Founded on New Zealand's trademark "Kiwi" determination, ingenuity and passion for life on the water, our first-hand experience with the ocean and great outdoors has provided a solid understanding of what it really takes to be a successful marine entertainment manufacturer. It is this experience and passion that is at the core of everything we do. Our drive to continually innovate has seen the delivery of many industry- and world-first, award-winning and customer-centric products that have set a new benchmark for marine audio entertainment. A commitment to innovation, quality and brilliant audio on the water — it's what we do best.

















#### TRUE-MARINE™ DESIGN



Fusion True-Marine products are designed and engineered by Fusion specifically for the marine environment. True-Marine products are subjected to rigorous environmental testing under harsh marine conditions to surpass industry guidelines of marine electronics. All Fusion True-Marine products are backed by Fusion's 3 year, industry leading warranty to last season after season on your boat.

#### MULTI-ZONE™ TECHNOLOGY



Fusion introduced Multi-Zone technology to the marine industry more than 10 years ago, giving you the freedom to independently control the music in up to four separate zones on board. Adjust the balance, subwoofer and volume levels, with each zone able to be named for quick zone identification, providing a simple, quick and easy way to control the audio in each zone of your boat.

#### FUSION DSP



The power of Fusion DSP enables the optimization of your audio system in each zone on board, providing customized listening in any environment. Every step of the audio chain is calculated and optimized by our engineers to deliver a technically superior listening experience — without the need for you to have the technical understanding. From the kick drum to your eardrum, Fusion DSP ensures you enjoy your music in the quality the musicians intended.

#### THE WORLD'S FIRST WI-FI® STEREOS



Wi-Fi audio streaming provides highquality audio streaming with a faster data transfer rate in comparison with BLUETOOTH® wireless technology. Seamless Apple AirPlay® 2 streaming is now available over Wi-Fi from a compatible Apple® device to the Apollo™ Series\* stereos, enabling you to stream your music to multiple Apollo units on the same network.

### FUSION-LINK"



Fusion-Link makes control of your on-water entertainment simple, convenient and easier than ever. Quickly find your favorite song, tune in to the sports or turn up the volume, all from your partnered multifunction display (MFD) with Fusion-Link over NMEA 2000®.

Download the free Fusion-Link app to bring wireless audio control to the palm of your hand, via BLUETOOTH wireless technology or Wi-Fi with your compatible device. Enjoy wireless audio control with your compatible device and the Fusion-Link app, or right from your wrist with your compatible Garmin watch and the free Fusion-Link Lite app.



## THE SUM OF AUDIO INNOVATION



## **APOLLO™ SERIES**

Enhance your time on the water with world-class Apollo Series marine audio entertainment products. These premium stereos feature a modern design aesthetic with robust, cutting-edge sound technology tailored to the marine environment. The result: clear, dynamic sound reproduction that sets a new industry benchmark in on-water listening enjoyment.

#### MS-RA770





The Apollo RA770 is the world's most-awarded marine stereo. It features a 4.3" touchscreen display with Fusion® DSP, built-in Wi-Fi® with Apple® AirPlay® 2, PartyBus™-Network technology, over-the-air software updates and Multi-Zone technology in four zones. It also has Fusion-Link™ control and

an IPX6 and IPX7 water resistant front face with True-Marine™ design.

#### MS-RA670



The Apollo RA670 reembodies award-winning innovation in a more compact form factor.
Key features include a 2.7" optically bonded color LCD, Fusion DSP, Multi-Zone technology in three zones and Fusion-Link control. When connected to a Wi-Fi network, you have the additional features of Apple AirPlay 2\*, over-the-air software updates\* and PartyBus-Network technology\*

#### MS-WB670



The Apollo WB670 hideaway stereo is designed to save dash space at the helm with its compact form factor. It inherits key features from the Apollo RA670, including Fusion DSP, PartyBus-Network technology\*, Wi-Fi audio streaming\* with Apple AirPlay 2\* and over-the-air software updates.\* It includes Multi-Zone technology in three zones and Fusion-Link control.

#### MS-SRX400



A perfect companion to the Apollo RA770, the compact Apollo SRX400 zone stereo features a 2.7" optically bonded color LCD, Fusion DSP, built-in Wi-Fi with Apple AirPlay 2, PartyBus-Network technology and over-the-air software updates for a superior audio experience.





## QUALITY, CONVENIENCE, BEST IN CLASS, THE ONLY MARINE STEREOS WITH Apple AirPlay 2.



The world's first marine stereo series to bring you seamless high-quality audio streaming from a music app via Apple AirPlay 2\* over Wi-Fi from a compatible Apple device. With Apple AirPlay 2, you can stream the same audio to every compatible Apollo stereo connected to the same network, and enjoy high-quality audio synchronized across the entire boat with volume control individually or globally.

### THE INDUSTRY AWARD-WINNING FEATURES OF THE APOLLO SERIES



### **FUSION DIGITAL** SIGNAL PROCESSING





#### THE WORLD'S FIRST MARINE WI-FI STEREO

Enjoy the clarity and premium quality of Wi-Fi audio streaming in a world-first for marine stereos, including the convenience of Apple AirPlay 2 and UPnP, with faster data transfer rate and increased connectivity range in comparison with BLUETOOTH® audio streaming.



### OVER-THE-AIR SOFTWARE UPDATES

Over-the-air software updates are now available from your compatible device via the free Fusion-Link app, making the Apollo Series intelligently simple and always up to date.



### **PARTYBUS** FUSION PARTYBUS-NETWORK

Engineered for those who value the freedom to play what they want, where they want, Fusion PartyBus-Network is the audio distribution system of the future. We have introduced a new intuitive user experience for the Apollo Series, allowing you to seamlessly navigate and control your entire boat's audio network.

Key functionalities include:

- Stereo grouping play the same synchronized audio source across grouped stereos.
- Volume control individual or group volume control.
- Power options turn on or off any Apollo Series stereo on the PartyBus-Network from another Apollo Series stereo or remote.
- · Home zone easy access to control where the stereo is installed.

## FUSION® MARINE ENTERTAINMENT



### **APOLLO AMPLIFIERS**



Fusion Apollo amplifiers are the difference between hearing the music and feeling it. They are efficient, easy-to-install and work with your compatible Fusion stereo system¹. With multichannel versions capable of producing an impressive 150-watt RMS per channel — and monoblock units outputting up to 650 watts RMS powering a subwoofer — these Apollo amplifiers deliver a crisp, clean, technically superior marine audio experience. The compact zone amplifier provides audio zone expansion for high-quality sound in more areas on your boat. They all use less power, so you can listen to music longer with less drain on your battery. Plus, the Easy Tune feature² automatically regulates audio settings for the best sound quality without manual adjustments.

Available in: Monoblock | 4 Channel | 6 Channel | 8 Channel | Zone Amplifier

NEW

#### **FUSION WAKE TOWER SPEAKERS**



Join the party, whether you're on the boat or behind it. Fusion wake tower speakers are designed to deliver crystal-clear, high-quality audio at any volume level — plus full-spectrum LED lighting to match your music and add the ideal visual ambience to your on-water entertainment experience. The speakers' acoustic properties have been specifically optimized for wake boat applications. Speakers are offered in a range of sizes, and they're built True-Marine™ tough to last season after season in harsh marine environments. A selection of accessory mounting brackets (sold separately) makes for easy installation and versatility on board.

Signature Series 3i available in: 6.5"

XS Series available in: 6.5"

#### SIGNATURE SERIES 3i SPEAKERS



Bring on the elements. The Signature Series 3i speakers deliver crystalclear audio and withstand harsh marine conditions like never before. New water-resistant connectors make installation easy and provide superior protection against the elements, season after season. CURV® Cone composite fiber technology produces greater sound definition at higher volumes. And CRGBW LED lighting (sports-style with LED models only) adds both Cool White and Warm White to the standard RGB LEDs, providing an unprecedented spectrum of colors to illuminate your boat and match your music for an unparalleled on-water entertainment experience.

Available in: 6.5" | 7.7" | 8.8"

#### SIGNATURE SERIES 3i SUBWOOFERS



Bring the thunder. The Signature Series 3i subwoofers deliver the drama with the premium low frequencies to enhance your listening experience. With new water-resistant connectors and a redesigned grille, these subwoofers are made for life on the water, just like you.

Available in: 10" | 12"

#### SIGNATURE SERIES AMPLIFIERS



The Signature Series range is made up of 5 premium, efficient and powerful amplifiers — monoblock, 4-channel, 5-channel, 6-channel and 8-channel, all designed to take your boating experience to the next level. A 24-volt, 6-channel amplifier is also available for boats operating on 24-volt electrical systems.

#### Available in:

Monoblock | 4 Channel | 5 Channel | 6 Channel | 24 Volt 6 Channel | 8 Channel

## FUSION® MARINE ENTERTAINMENT



### **XS SERIES MARINE SPEAKERS**

Enjoy high-performance acoustics on the water season after season with the XS Series speakers. Continuing to set the benchmark for marine audio entertainment, these full-range speakers bring you trademark quality audio reproduction from Fusion, enhanced marine aesthetics and RGB LED lighting, all at a midrange price point.

Available in: 4" | 6.5" | 7.7"

### FM SERIES MARINE SPEAKERS



The FM Series marine speakers are engineered to deliver quality acoustics to your boat in a sleek and minimalistic aesthetic to meet the latest boat design trends. The FM Series is designed to be flush mounted with a mounting profile no thicker than 2.5mm [3/32"], for a near flat finish.

Available in: 6.5" | 7.7"

## THE BENCHMARK FOR MARINE ENTERTAINMENT

#### MS-RA210



The MS-RA210 is a powerful compact marine stereo featuring Fusion's new-look design aesthetics and DSP for an optimized audio entertainment experience. With a brilliant 2.7° optically bonded, full-color LCD, Fusion-Link™ control, and IPX6 and IPX7 rated from the front face, the MS-RA210 is a sleek addition to your boat.

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



The value-for-money RA70 Series is perfect for delivering quality audio on board, featuring a DIN sized design, BLUETOOTH® wireless technology and ANT® capabilities. Enjoy NMEA 2000® connectivity (MS-RA70N and MS-RA70NSX) and SiriusXM®-ready satellite radio, with advanced features (available only in MS-RA70NSX).

#### MS-RA60



The new MS-RA60 is the most economical marine stereo from Fusion yet, featuring modern aesthetics, Multi-Zone™ technology in two zones and advanced connectivity options in a compact form factor. It features a perimeter bonded, anti-fogging LCD is integrated into the IPX6 and IPX7 water-resistant black front

## REMOTE AUDIO CONTROLS

#### APOLLO™ ERX400 WIRED REMOTE



Sleek, compact and easy to install, the Apollo ERX400 wired remote control adds intuitive and integrated audio control to any zone on board your boat. It features a 2.7" optically bonded color LCD. And connecting a single proprietary Ethernet cable to an Apollo Series network or individual stereo makes installation a breeze.

#### ANT-ENABLED ARX REMOTE



Retrofit your Fusion ANT-enabled system with the MS-ARX70 ANT remote to enjoy the convenience of wireless audio control from anywhere around your boat. Rated both IPX6 and IPX7 water resistant, the remote is perfect for the swim platform, bow, transom or anywhere you want quick access to audio adjustments.

#### CRGBW WIRELESS REMOTE CONTROL



Enjoy full control of the illumination options and functions of your Fusion CRGBW speakers and subwoofers with the CRGBW wireless remote control. Control the color using the intuitive color select wheel and also adjust the brightness, light mode (static or dynamic) and speed with the press of a button.





## GPSMAP® 8400 MFD SERIES









010-01510-00 | GPSMAP 8417

10-01511-00 | GPSMAP 842

010-01512-00 | GPSMAP 842

Large-format multifunction displays feature full HD in-plane switching (IPS) touchscreens that provide consistent, accurate colors from all viewing angles even while wearing polarized sunglasses. GPSMAP 8400 series are compatible with Garmin Navionics+™ and Garmin Navionics Vision+™ cartography.



PINCH TO ZOOM TOUCHSCREEN

HIGH RESOLUTION, IPS DISPLAY

HIGH PERFORMANCE PROCESSOR

**FULLY NETWORKABLE** 

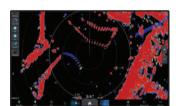


#### GARMIN NAVIONICS+ AND GARMIN NAVIONICS VISION+ CARTOGRAPHY



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

#### **FANTOM RADAR**



Supports Fantom™ radar with MotionScope™ technology.

#### DIGITAL SWITCHING SUPPORT



Nearly all your controls are available right at your fingertips.

#### CAMERA INTEGRATION



Supports camera integration for Garmin marine cameras, selected Axis cameras and FLIR® thermal vision cameras

## **ADDITIONAL SERIES FEATURES**

- SmartMode<sup>™</sup> provides one-touch access to docking, cruising, fishing, anchoring and more
- Install multiple displays either flush or flat mounted edge-to-edge
- Supports Garmin black box sonar systems; view multiple sources simultaneously
- Enhanced video processing with up to 4 IP (internet protocol) camera streams at the same time
- Built-in Wi-Fi® pairs with free ActiveCaptain™ app for access to OneChart™ to purchase and download new charts, smart notifications², software updates, Garmin Quickdraw™ Community data and more
- Presets for sonar, radar, cameras, media and digital switching can be independent or incorporated into SmartMode™ station controls
- Built-in Garmin SailAssist™ feature provides data, displays and prerace guidance needed to gain a competitive edge
- Network compatible connectivity includes Wi-Fi<sup>®</sup>, ANT<sup>®</sup> technology, 4-wired Ethernet ports, NMEA 2000, HDMI and USB ports, FUSION-Link integration
- OneHelm and EmpirBus bring full control of all your onboard boat systems, such as digital switching, lighting, propulsion, pumps, air conditioning and infotainment, to your MFD screen

### **GRID 20 REMOTE INPUT DEVICE**

Landscape: 010-02011-01 Portrait: 010-02011-00

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.



# GPSMAP® 8400 CHARTPLOTTER SERIES









010-02092-00 | GPSMAP 8412 010-02092-02 | GPSMAP 8412xsv



010-02093-00 | GPSMAP 8416 010-02093-02 | GPSMAP 8416xsv

Chartplotter and chartplotter/sonar combos featuring full HD in-plane switching (IPS) touchscreen displays for wider viewing angles, superior clarity and sunlight readability, even with polarized sunglasses. GPSMAP 8400 series are compatible with Garmin Navionics+™ and Garmin Navionics Vision+™ cartography.



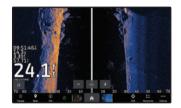
HIGH PERFORMANCE PROCESSOR

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™



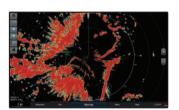
Supports all LiveScope sonar, including the LiveScope Plus and LiveScope XR system.

#### GARMIN NAVIONICS+ AND GARMIN NAVIONICS VISION+ CARTOGRAPHY



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

#### **GMR FANTOM RADAR**



Supports Fantom™ radar with MotionScope™ technology.

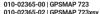
- Full HD IPS touchscreen display for wider viewing angles, superior clarity and sunlight readability even with polarized sunglasses
- Built-in support for the full suite of Garmin sonar capabilities: CHIRP traditional, ClearVü and SideVü scanning sonars, Ultra-High Definition scanning sonar (no black 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 6, VIRB 360, gWind Wireless 2 and more
- OneHelm™ and EmpirBus bring full control of all your onboard boat systems, such as digital switching, lighting, propulsion, pumps, air conditioning and

- infotainment, to your MFD screen
- SmartMode™ station controls enable presets for one-touch access to docking, cruising, fishing, anchoring and more
- Built-in SailAssist provides data, displays and pre-race guidance needed to gain a competitive edge
- Use built-in Wi-Fi® to pair with the free ActiveCaptain™ app for access to OneChart™, smart notifications², Garmin Quickdraw™ Community data and more
- Watch your favorite entertainment while on the water! Connect HDMI and composite video for full integration with your PC or phone

# **GPSMAP® X3 SERIES**









10-02366-00 | GPSMAP 923



010-02367-00 | GPSMAP 1223

Boasting more pixels and processing power than previous-generation GPSMAP devices, these fast, responsive touchscreen units offer seamless network integration and support for traditional and scanning sonar capabilities¹, J1939 engine connectivity, OneHelm™ digital switching and more. GPSMAP x3 series are compatible with Garmin Navionics+™ and Garmin Navionics Vision+™ cartography.

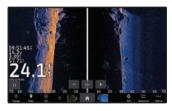


ONEHELM™ DIGITAL SWITCHING CAPABILITIES COMPATIBLE WITH GARMIN NAVIONICS+ AND GARMIN NAVIONICS VISION+ CARTOGRAPHY, BOTH FEATURING NAVIONICS DATAN AND AUTO GUIDANCE+<sup>2</sup>

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

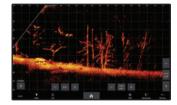


#### **ULTRA HIGH-DEFINITION SONAR**



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

#### LIVESCOPE™



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

#### GARMIN NAVIONICS+ AND GARMIN NAVIONICS VISION+ CARTOGRAPHY



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

#### NMEA 2000® AND NMEA 0183 NETWORKS



Connect to autopilots, digital switching, weather, your Fusion-Link™ audio system, media, VHF, AIS and more from one screen.

- Bright, easy-to-use, sunlight-readable displays have more pixels than previousgeneration GPSMAP touchscreens for ultra-sharp visibility from any angle
- Slimline display borders, edge-to-edge glass and reduced unit footprint make for easy retrofit 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 Wi-Fi® networking to pair with the free ActiveCaptain® app³ for access to OneChart™, smart notifications, software updates and more
- Integrated ANT® technology support for use with your compatible quatix® 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 motor for full control of the motor from the chartplotter screen, plus the ability to route to waypoints, follow tracks and more

# **GPSMAP** 1022/1222 SERIES









010-01740-02 | GPSMAP 1022xsv

010-01741-02 | GPSMAP 1222xsv

All-in-one networking chartplotter/sonar combos with large, bright screen coupled with a quick and easy-to-use keypad interface with user-programmable keys and a multifunction control knob. Builtin single channel CHIRP sonar, CHIRP ClearVü and CHIRP SideVü scanning sonar and LiveScope™ support. GPSMAP 1022/1222 series are compatible with Garmin Navionics+™ and Garmin Navionics Vision+™ cartography.



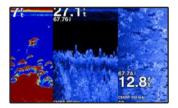
### **KEYED INTERFACE WITH MULTIFUNCTION CONTROL KNOB**

#### FULLY NETWORKABLE

### XSV MODELS INCLUDE BUILT-IN CHIRP TRADITIONAL. CLEARVÜ AND SIDEVÜ SCANNING SONAR

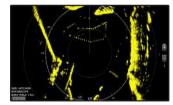


#### **BUILT-IN SONAR**



All feature incredibly clear CHIRP

#### FANTOM RADAR



Supports Fantom™ radar with MotionScope™ technology.

### **GARMIN NAVIONICS+ AND GARMIN** NAVIONICS VISION+ CARTOGRAPHY



Highly detailed maps and cartography featuring Navionics data and Auto Guidance+ technology1.

#### LIVESCOPE



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

- Features a bright screen coupled with a quick and easy-to-use keypad interface with user-programmable keys and a multifunction control knob
- Built-in Garmin single-channel CHIRP traditional sonar, 1 kW CHIRP ClearVü and CHIRP SideVü scanning sonar (xsv models)
- Support all compatible Garmin sonar options plus black box sonar systems; view multiple sources simultaneously
- Force Trolling Motor Compatible

- Network compatible connectivity includes Wi-Fi®, ANT® technology, Ethernet ports, NMEA 2000, HDMI and USB ports, FUSION-Link integration
- Built-in Garmin SailAssist™ feature provides data, displays and prerace guidance needed to gain a competitive edge
- ActiveCaptain® application support

# **ECHOMAP ULTRA SERIES**







010-02111-00 | ECHOMAP Ultra 102sv w/o xdcr 

010-02113-00 | ECHOMAP Ultra 122sv w/o xdcr

All the fishing tools are built-in. Chartplotter/sonar combos with keyed-assist touchscreen displays. Built-in CHIRP traditional and Ultra High-Definition ClearVü and SideVü scanning sonar1. Supports our full line of LiveScope sonars. Compatible with Garmin Navionics+<sup>™</sup> and Garmin Navionics Vision+<sup>™</sup> cartography<sup>2</sup>.



**BUILT-IN CHIRP TRADITIONAL AND** ULTRA HIGH-DEFINITION, CLEARVÜ AND SIDEVÜ SCANNING SONAR

COMPATIBLE WITH GARMIN NAVIONICS+ AND GARMIN NAVIONICS VISION+ CARTOGRAPHY. BOTH FEATURING NAVIONICS DATA AND AUTO GUIDANCE+

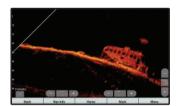
SHARE SONAR, CHARTS WAYPOINTS AND ROUTES

### ULTRA HIGH-DEFINITION SONAR



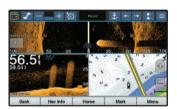
Built-in support for the Ultra High-Definition scanning sonar system, no black box needed.

#### LIVESCOPE™



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

#### FORCE™ TROLLING MOTOR COMPATIBLE



Get full control of the motor from the screen, plus the ability to route to waypoints, follow tracks and more.

### GARMIN NAVIONICS+ AND GARMIN NAVIONICS VISION+ CARTOGRAPHY



Highly detailed maps and cartography featuring Navionics® data.

- 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' software updates, Garmin Quickdraw™ Community data and more
- Network capable with NMEA 2000® connectivity and support for heading sensors, autopilots, digital switching and FUSION-Link™ audio system and more
- · Quick-disconnect bail mount

## ECHOMAP" UHD2 5" AND 7" CV SERIES





010-02592-60 - ECHOMAP UHD2 55cv, UK, Ireland & Holland GN+, w/o xdcr



010-02596-60 - ECHOMAP UHD2 75cv, UK, Ireland & Holland GN+, w/o xdcr

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 sonars¹. Know the waters you're in with Pre-Loaded UK, Ireland & Holland Garmin Navionics+™ cartography.

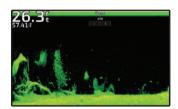


BUILT-IN CHIRP TRADITIONAL AND CLEARVÜ SCANNING SONAR PRE-LOADED WITH GARMIN NAVIONICS+ FOR UK, IRELAND & HOLLAND. COMPATIBLE WITH GARMIN NAVIONICS VISION+ BOTH FEATURING NAVIONICS DATA AND AUTO GUIDANCE+

SHARE SONAR, WAYPOINTS AND ROUTES WITH OTHER ECHOMAP DEVICES

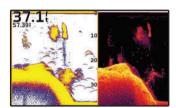


#### SONAR SUPPORT



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

#### **VIVID COLOR PALETTES**



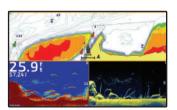
High-contrast vivid scanning sonar color palettes make it easier than ever to distinguish targets and structure.

#### PRE-LOADED CHARTS



Pre-loaded with Garmin Navionics+ cartography for UK & Ireland.

#### 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.

- Use built-in Wi-Fi® networking to pair with the free ActiveCaptain® app for access to OneChart™, smart notifications, software updates and more²
- Support for Garmin Navionics+ and Garmin Navionics Vision+ marine cartography

## ECHOMAP" UHD SERIES





010-02332-10 - ECHOMAP UHD 65cv, UK/IRE,



010-02336-10 - ECHOMAP UHD 75cv, UK/IRE, W/o xdcr 010-02340-10 - ECHOMAP UHD 75sv, UK/IRE,



010-02344-10 - ECHOMAP UHD, 95sv, UK/IRE,

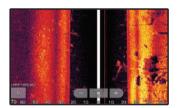
The 6" keyed and 7" and 9" touchscreen chartplotter/sonar combos with keyed assist¹ support transducers for Ultra High-Definition ClearVü and SideVü scanning sonar and Garmin CHIRP traditional sonar. EchoMAP UHD series are Pre-Loaded with UK & Ireland BlueChart cartography. EchoMAP UHD series 7" & 9" are compatible with Garmin Navioncs+™ and Garmin Navionics
Vision+™ cartography.



BUILT-IN CHIRP TRADITIONAL AND ULTRA HIGH-DEFINITION CLEARVÜ AND SIDEVÜ SCANNING SONAR<sup>2</sup> SHARE SONAR, WAYPOINTS AND ROUTES WITH OTHER ECHOMAP™ DEVICES NMEA 2000° AND NMEA 0183 NETWORK SUPPORT FOR AUTOPILOT AND ENGINE DATA ECHOMAP UHD 7" & 9" ARE COMPATIBLE WITH GARMIN NAVIONICS+ AND GARMIN NAVIONICS VISION+ CARTOGRAPHY<sup>3</sup>

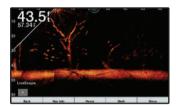


#### **ULTRA HIGH-DEFINITION SONAR**



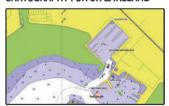
Built-in support for the Ultra High-Definition scanning sonar system, no black box needed.

#### LIVESCOPE™



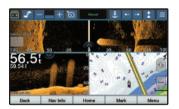
Supports all LiveScope sonar, including the LiveScope Plus and LiveScope XR system (7" and 9" models only).

## PRE-LOADED WITH BLUECHART CARTOGRAPHY FOR UK & IRELAND



Highly detailed maps and cartography featuring Navionics® data.

#### 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).

- · 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 notifications⁴, 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

## ECHOMAP PLUS 45CV





010-01887-10 - ECHOMAP Plus 45cv, UK/IRE,

This compact combo has lots of built-in benefits. Easy-to-install and even easier to use, it has a bright 4.3" display that is easy to read on a sunny day on the water. It features built-in support for Garmin CHIRP traditional sonar that delivers remarkable target separation and CHIRP ClearVü™ scanning sonar for nearly photographic images of what's below the boat. Pre-Loaded with UK & Ireland BlueChart cartography.



SUNLIGHT-READABLE DISPLAY

BUILT-IN CHIRP TRADITIONAL AND CLEARVÜ SCANNING SONAR

COMPATIBLE WITH BLUECHART G3
AND BLUECHART G3 VISION

BUILT-IN QUICKDRAW CONTOURS



#### **BUILT-IN SONAR**



All feature incredibly real CHIRP traditional and scanning sonar.

#### QUICKDRAW CONTOURS MAPPING



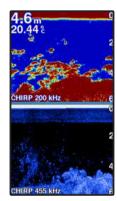
Create and store maps as you fish with 1' contours for up to 2 million acres.

#### BLUECHART G3 CHARTS



Highly detailed coastal charts featuring Navionics data. Pre-loaded with bluechart cartography for UK & Ireland.

#### **COMBO SCREEN**



View both traditional CHIRP and CHIRP ClearVü at the same time.

- · Bright, sunlight-readable 4.3" combo
- Built-in support for Garmin CHIRP traditional sonar plus CHIRP ClearVü™ scanning sonar (transducer sold separately)
- Preloaded worldwide basemap; compatible with BlueChart® g3 and premium BlueChart® g3 Vision coastal charts with integrated Navionics® data and Auto Guidance¹ technology
- Built-in Quickdraw Contours mapping software instantly creates personalized fishing maps on-screen with 1' contours as you fish
- Share waypoints and routes with other ECHOMAP  $^{\scriptscriptstyle{\text{TM}}}$  or STRIKER  $^{\scriptscriptstyle{\text{TM}}}$  units





# FORCE TROLLING MOTOR SERIES

Move your fishing to a higher level with force. The Force trolling motor is the most powerful and most efficient 57" freshwater trolling motor available1. Wireless chartplotter connectivity provides navigation, autopilot and anchor lock features. Use the precise anchor lock to hold your boat in the same location while you fish. Force includes a convenient wireless foot pedal that provides instant control and responsiveness yet feels and steers like a cable-steered pedal. See more fish and structure clearly with integrated Ultra High-Definition scanning sonar. It also includes a handheld remote control with a built-in sunlight-readable display. The remote gives you complete control of the trolling motor and simple point-and-go gesture steering.

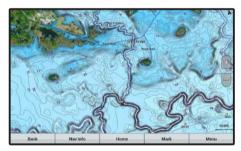
You get the best of all three. The powerful Force trolling motor has the power to move you from spot to spot more quickly and stand up better to winds and currents. Even with all that power, it is also the most efficient trolling motor available so you can count on it to fish all day. And it is still whisper quiet. Its high-efficiency brushless motor operates at either 36 V or 24 V. When running at 24 V, it delivers comparable thrust to our competitors' 36 V motors. The most powerful, most efficient and quiet trolling motor — it's everything you could want in a trolling motor.

Force Trolling Motor 50" - Part no. 010-02024-00 Force Trolling Motor 57" - Part no. 010-02025-00



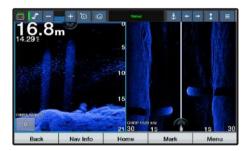


## CHARTPLOTTER INTEGRATION



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.



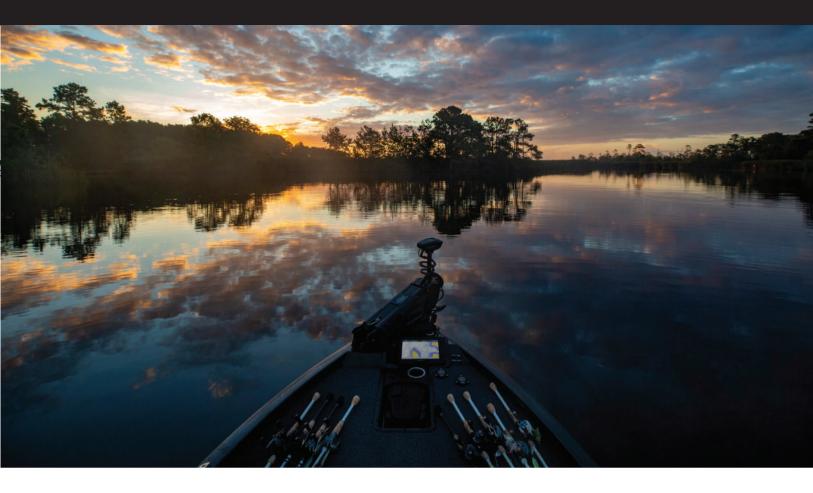
The Force trolling motor comes with an integrated transducer with CHIRP traditional and Ultra High-Definition ClearVü and SideVü scanning sonars with imperceptible sonar noise interference.

## 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

GARMIN

 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, transflective 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.







# **GMR FANTOM** RADARS



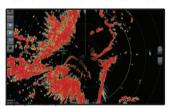
## GMR FANTOM™ 254/256 SERIES

With 250 watts of solid-state output, the new GMR Fantom 254 and 256 series radars give you the power you need for serious scanning you can trust. Your choice of 4' or 6' open arrays each provide the reach to track severe weather up to 96 nautical miles away. So you can see it sooner to avoid it better. Then for added safety on the water, exclusive MotionScope™ technology detects and highlights moving targets to help you recognize potential collision hazards or even track bird flocks that can lead you to the best fishing spots out there.

## SPECIAL FEATURES

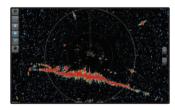
#### MOTIONSCOPE TECHNOLOGY

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



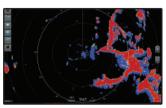
#### AUTO BIRD GAIN

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.



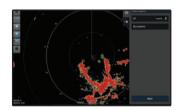
#### **ECHO TRAILS**

The radar's True Echo Trails feature displays a historical "trail" on the screen to help you quickly identify moving targets.



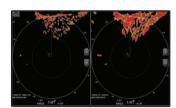
#### **AUTOMATIC MARPA ACQUISITION**

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



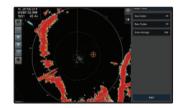
#### PULSE COMPRESSION

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



#### 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.



### THE LINEUP

Wattage

**Dome Dimension** 

**Open Array** 

**Dynamic Auto Gain and Sea Filter Settings** 

**Target Size Adjustment** 

MARPA Target Tracking

**Dual Radar Support** 

Guard Zone

**RPM** 

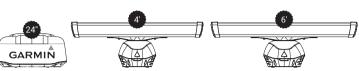
Beam Width

Minimum Range

Maximum Range

## GMR FANTOM™ RADARS





GMR Fantom radars feature MotionScope™ technology, which uses the Doppler effect to detect and highlight moving targets to help you avoid potential collisions, find flocks of birds and track weather. These radars fully integrate with select Garmin chartplotters.

## FEATURED — GMR FANTOM™ 24X



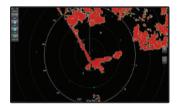
MOTIONSCOPE TECHNOLOGY PULSE COMPRESSION TECHNOLOGY

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

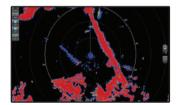


#### MOTIONSCOPE



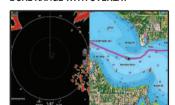
MotionScope technology highlights moving targets so you can navigate around other boats or severe weather — or toward birds feeding at the surface.

#### **ECHO TRAILS**



Echo Trails leave 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 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.

GMR Fantom 18X	GMR Fantom 24X	GMR Fantom 54	GMR Fantom 56	GMR Fantom 124	GMR Fantom 126	GMR Fantom 254	GMR Fantom 256
010-00959-00	010-00960-00	K10-00012-17	K10-00012-18	K10-00012-08	K10-00012-08	K10-00012-22	K10-00012-22
50	50	50	50	120	120	250	250
20" dia., 9.8" high	25.4" dia., 9.8" high						
		4'	6'	4'	6'	4'	4'
•	•	•	•	•	•	•	•
•	•	•	•	•	•	•	•
Yes <sup>1</sup>	Yes <sup>1</sup>	Yes <sup>1</sup>	Yes <sup>1</sup>	•	•	•	•
•	•	•	•	•	•	•	•
•	•	•	•	•	•	•	•
24/48/60	24/48/60	24/48	24/48	24/48	24/48	24/48	24/48
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
6 meters	6 meters	6 meters	6 meters	6 meters	6 meters	6 meters	6 meters
48 nm	48 nm	72 nm	72 nm	96 nm	96 nm	96 nm	96 nm

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

GARMIN.COM

## GMR™ XHD2 RADARS







GMR xHD2 open-array radars are designed for serious seafarers of larger yachts and sport fishing boats. Designed for easy installation and use, there are no complex user settings to fuss around with. Just install it and start using. GMR xHD2 radars provide reliable, optimum performance in all conditions.

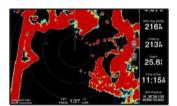


POWER TO DELIVER EXCELLENT TARGET SEPARATION AND AMAZING IMAGE CLARITY PULSE EXPANSION MAXIMIZES ENERGY ON TARGET AUTO BIRD GAIN HELPS LOCATE FLOCKS OF BIRDS AND HELPS SIGNAL THE LOCATION OF BIG GAME FISH

OVERLAY RADAR ONTO CHART SCREEN AS A SINGLE DISPLAY OR SPLIT SCREEN WITH INDEPENDENT RANGE SETTINGS

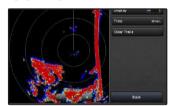


#### PULSE EXPANSION



Pulse Expansion maximizes energy on targets to provide a larger target size on the chartplotter.

#### **ECHO TRAILS**

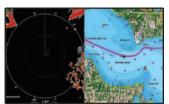


Echo Trails leave a historical "trail" on the screen to help you quickly identify moving targets.

20 meters

72 nm

#### **DUAL RANGE WITH OVERLAY**



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

20 meters

72 nm

#### **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 424 XHD2 GMR 1224 XHD2 GMR 1226 XHD2** GMR 2526 XHD2 K10-00012-08 K10-00012-11 K10-00012-12 K10-00012-16 4' open array with pedestal 6' open array with pedestal **Transmit Power** 4 kW 12 kW 12 kW 25 kW **Dynamic Auto Gain and Sea Filter Settings Target Size Adjustment** MARPA Target Tracking<sup>1</sup> **Dual Radar Support Guard Zone Dual Range Power Consumption** 65 W typical 90 W typical 90 W typical 100 W typical **RPM** 24/48 24/48 24/48 24/48 1.8° horizontal, 1.8° horizontal, 1.1° horizontal, 1.1° horizontal, **Beam Width** 23° vertical 23° vertical 23° vertical 23° vertical

20 meters

72 nm

20 meters

96 nm

Minimum Range

**Maximum Range** 

## **GMR** XHD DOME RADARS







Our 4 kw high-definition GMR xHD dome radars pair ease of use with advanced open-array features. Dual range operation allows fully independent split-screen display of far and close radar views. They're intuitive operation makes modes and settings simple to understand so you can enjoy great performance without a lot of technical know-how.



4 KW HIGH-DEFINITION 18" OR 24" DOME RADAR

48 OR 24 RPM ROTATION SPEEDS

48 NM MAX RANGE SETTING

DUAL RANGE OPERATION



### 9-AXIS HEADING SENSOR

Part no: 010-11417-20



Our premium solution for exceptional heading accuracy allows for MARPA tracking and improves 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. Built to withstand bilge environments.

THE LINEUP	GMR 24 XHD	GMR 18 XHD	GMR 18HD+	
	010-00960-00	010-00959-00	010-01719-00	
4 kW Transmit Power	•	•	•	
Dual Range	•	•		
Radar Overlay Support	•	•	•	
Power Consumption	30 W typical, 48 W max	30 W typical, 48 W max	18.1-24.4 W transmit	
Power Input	11-35 V DC	11-35 V DC	11-35 V DC	
RPM	24/48	24/48	24	
Beam Width	3.7° horizontal, 25° vertical	5.2° horizontal, 25° vertical	5.2° horizontal, 25° vertical	
Minimum Range	20 meters	20 meters	20 meters	
Maximum Range	48 nm	48 nm	36 nm	



## **GNX™ 130 AND 120**



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** 

DIGITS ARE THE LARGEST DIGITS IN CLASS

DISPLAYS MORE THAN 50 SAILING 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. Preset four buttons to dedicated configurations. Even 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**<sup>™</sup> WIND



A superb addition for all sailboats, GNX Wind features a high-visibility, glass-bonded backlit LCD display with customizable colors. 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.

## GNX<sup>™</sup> 21 & 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.

#### GMI<sup>™</sup> 20 Part no: 010-01140-0



The GMI 20 has a 4" color screen that displays depth, speed, wind, engine information and over 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.

#### COMPATIBLE SENSORS AND INSTRUMENTS FOR GMI 20



## WIND TRANSDUCERS



Garmin gWind™ sensors feature a 3-bladed propeller and twinfin design for more accurate True Wind Speed (TWS) in lighter air and more 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



Features twin-fin technology with 3-bladed propeller for more accurate True Wind Speed in lighter air while the twin-fin design gives a more stable True Wind Angle. 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 feet. Accurate wind signals are sent via an ANT® connection directly to a GNX™ Wind instrument or compatible Garmin GPSMAP® series chartplotters¹. 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 feet (1 meter) straight pole that raises the transducer above the mast to remove turbulence errors. 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 & 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 & 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 & 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 & 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, true wind data fields and tide/current/time slider. For sail racing, there are prerace guidance, synchronized race timer, virtual starting line, time to burn and lay line data fields¹.

#### **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**



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







## VHF AND AIS

### CORTEX® V1 VHF MARINE RADIO

Part no: 010-02814-20



A revolution in marine communication that will change your VHF experience forever. An intuitive touchscreen handset engineered for durability, with powerful clear audio and the benefits of integrated AIS and remote monitoring. Add additional Cortex handsets for even greater control.

## VHF 315i MARINE RADIO

Part no: 010-02047-01



The 25-watt VHF 315i marine radio with Class D DSC is a modular communication solution. It includes a GHS™ 11i handset and new active speaker to use as an intercom between up to 3 stations. It's easy to use and integrates seamlessly into the Garmin onboard system.

## VHF 215i AIS MARINE RADIO

Part no: 010-02098-01



Marine radio with built in GPS. Displays Automatic Identification System (AIS) on the chartplotter and during an emergency situation, the 25 W transmit power of the VHF 215i AIS gives all fishermen, sailors and cruisers confidence at their fingertips.

### VHF 215i MARINE RADIO

Part no: 010-02097-01



The 25-watt marine radio with built in GPS with Class D DSC is a modular communication solution. Compatible with the GHS™ 11i second-station handset and preprogrammed with international marine channel. It's easy to use and integrates seamlessly into the Garmin onboard system.

## VHF 115i MARINE RADIO

Part no: 010-02096-01



Communication is critical on the water. With the VHF 115i radio with built in GPS can you stay in contact with the shore and other boats in your area. So, no matter where you are or where you're headed, you'll maintain communication.

## GHS™ IIi WIRED VHF HANDSET

Part no: 010-01759-01



Allows full function of your VHF 215i or VHF 315i radio from a remote location. Simple design includes soft keys, a 2" diagonal dot matrix display and coiled cable that stretches from about 1' to nearly 5'. Rotary/push knob for volume, squelch and channel selection and a dedicated button for access to channels 16/9.

THE LINCHD					
THE LINEUP	VHF 115i	VHF 215i	VHF 215i AIS	VHF 315i	Cortex V1
Transmit Power	25 W	25 W	25 W	25 W	25 W
Built-in GPS	•	•	•	●1	•1
NMEA 2000®	•	•	•	•	•
NMEA 0183	•	•	•	•	•
Digital Selective Calling	Class D	Class D	Class D	Class D	Class D
International Frequency Band	•	•	•	•	•
10 NOAA Weather Channels	•	•	•	•	•
Hailer horn		•	•	•	•
Supports GHS 11i		•	•	•	

# **AIS TRANSCEIVERS**

### CORTEX® M1 SMARTAIS

Part no: 010-02815-20



A full Class B SOTDMA smartAIS®, the Cortex M1 hub proactively alerts you of potential collisions, anchor drag and man overboard situations. Send and receive capability, monitor and control on board systems and keep alerted onboard or ashore from your compatible smartphone. Access remote vessel monitoring and control. Anchor watch alerts you if your anchor drags or if there is a change in wind speed, direction or water depth. Uses a single antenna with built-in splitter. Connect up to 5 sensors directly or network to NMEA 2000® to monitor sensors remotely. It's VHF ready, simply add a Cortex handset for full VHF functionality.

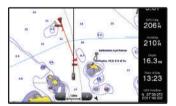
## AIS<sup>™</sup> 800



Easy to use, the AIS 800 black box transceiver with built-in GPS provides reliable communication and transmits your vessel information to other AIS receivers in your area while receiving AIS target data. With 5 watts of transmit power with Class B/SO, it provides faster positioning reporting than ever before<sup>1</sup>.

Garmin AIS 800 has an internal VHF antenna splitter, which allows the VHF and AIS to share a single antenna. It includes a built-in GPS (with connector for optional external antenna) and integrates seamlessly into the Garmin onboard system. The transceiver features NMEA 2000/0183® connectivity for easy integration with compatible chartplotters and multifunction displays.

#### **COLLISION WARNINGS**



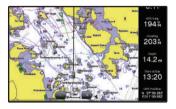
Risks are clearly indicated, which greatly minimises the risk of collision.

#### **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



# SIXON



# **SONAR BLACK BOXES**

# GSD 26 Part no: 010-00958-00



The GSD 26 professional CHIRP sonar module is serious sportfishing technology that takes clear, concise target separation to far greater depths than traditional sonar.

# GSD 25 Part no: 010-01159-00



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.

GSU 24 Part no: 010-00957-00



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

## GCV<sup>™</sup> 20

Part no: GCV 20: 010-00958-00, GCV 20 w/ xdcr GT34UHD: 010-02055-00



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				
IIIL LINLUI	GSD 26	GSD 25	GSD 24	GCV 20
Garmin Marine Network Ports	1	1	1	3
Frequencies Supported	25-210 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	25-3,000 W rms	1 kW	25-2,000 W rms	500 W rms
ClearVü/Sideü		•		•
Max Depth	10,000 ft (3,048 m)	5,000 ft. (1,524 m)	5,000 ft. (1,524 m) 5,000 ft. (1,524 m)	
Traditional CHIRP capable	•	•		
Power Input	10-35 V	10-35 V	10-35 V	10-35 V
Power Usage	100 W maximum	27 W maximum	40 W maximum	10.5 W maximum
Compass-safe distance	23.6 in. (60 cm)	11.8 in. (30 cm)	15.75 in. (40 cm)	10.2 in. (26 cm)





# STRIKER VIVID SERIES





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 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.

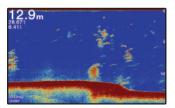
## FEATURED — STRIKER PLUS 7SV



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

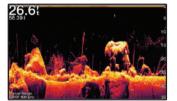


## **CHIRP TRADITIONAL**



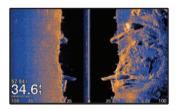
Crisp, clear CHIRP traditional sonar.

## 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.

THETMININ							
THE LINEUP	STRIKER 4	STRIKER Plus 4	STRIKER Vivid 4cv	STRIKER Vivid 5cv	STRIKER Vivid 7cv	STRIKER Vivid 7sv	STRIKER Vivid 9sv
	010-01550-01	010-01870-01	010-02550-01	010-02551-01	010-02552-01	010-02553-01	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®					•	•	•
ActiveCaptain® App Compatible¹					•	•	•
Transducer and Mounts Included	•	•	•	•	•	•	•

# 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 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.

010-02246-02 | STRIKER Cast, GPS 010-02246-00 | STRIKER Cast, Non GPS



STREAMS LIVE SONAR

PAIR WITH STRIKER CAST APP, FOR IOS AND ANDROID

UP TO 200' SONAR RANGE

10+ HOURS BATTERY LIFE<sup>1</sup>



## 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 smartphone or tablet.

## SELECTABLE MODES



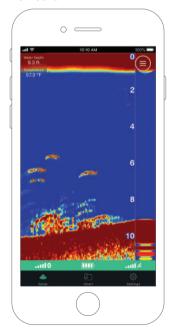
Choose your views from easy-tointerpret traditional 2-D sonar and ice fishing flasher modes, with setting adjustments for gain, range and more.

## 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.







# GHP" REACTOR 40 AUTOPILOT SERIES





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. Solidstate 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 routes1 with compatible chartplotters and Garmin Navionics+™ and Garmin Navionics Vision+™ cartography, as well as legacy BlueChart g3 and q3 Vision charts. Flexible mounting options<sup>2</sup> and guick, easy 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 compas

## **ADDITIONAL SERIES FEATURES**

- 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
- Shadow Drive<sup>™</sup> technology automatically disengages the autopilot when you turn the wheel
- Control the autopilot directly from the screen of your compatible chartplotter
- Access Auto Guidance+1 with compatible chartplotters and Garmin Navionics+™ and Garmin Navionics Vision+™ cartography. 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.



#### 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 coursecorrect 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 steerings 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<sup>™</sup> 50 control units
- · Add optional Autopilot Remote for control anywhere on your boat

# 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
- 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
- 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<sup>™</sup> 50 control units

# **PUMPS**

1.2-LITRE PUMP KIT

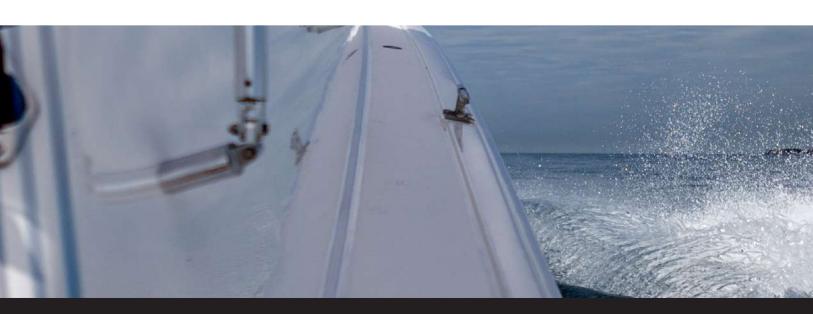
Part no: 010-00705-64



2-LITRE 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<sup>™</sup> 50 control units
- The Reactor 40 autopilot can follow auto-guided routes with compatible chartplotters and Garmin Navionics+™ and Garmin Navionics Vision+™ cartography, 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 TONNES

Part no: 010-11572-00



CLASS B COMPACT HYDRAULIC DRIVE UNIT FOR BOATS UP TO 22 TONNES

Part no: 010-12029-00



CLASS B HYDRAULIC DRIVE Unit for Boats up to 36 Tonnes

Part no: 010-11573-00





# 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 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 boats less than 30 feet long
- Available in 3 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: 010-00705-99

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







# 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<sup>™</sup> 200 MARINE IP CAMERA



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

Part no: 010-01865-31

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<sup>™</sup> 14 MARINE CAMERA

Part no: 010-02667-00

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 LIMEUD			
THE LINEUP	GC 14 Maine Camera	GC 200 Marine IP Camera	GC 100 Marine Camera
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 1080P1	720p
One-button startup			•
Pair multiple camera		•	•
Connection to Chartplotter	Analog	IP	Wi-Fi®
Hardwired Power	12V	12V and POE	12V



# **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 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** 



## SEEMLESS SITUATIONAL AWARENESS



The 360-degree video feed integrates with compatible Garmin chartplotters or MFD helm displays. Each camera view can also be monitored individually.

## VISUAL BUMPER



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

## 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



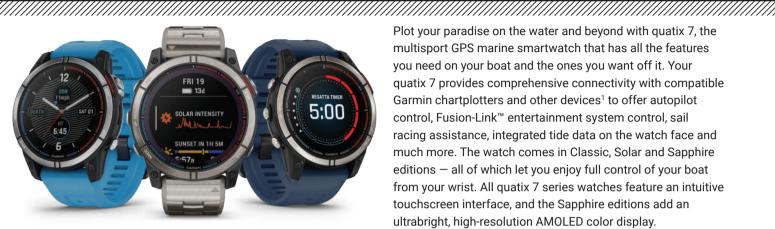
Thru-hull OFM installation offers secure fit and calibration of the Surround View Camera System. For easy maintenance, any of the cameras can be replaced externally.







# **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 and other devices1 to offer autopilot control, Fusion-Link™ entertainment system control, sail racing assistance, integrated tide data on the watch face and much more. The watch comes in Classic, Solar and Sapphire 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 Sapphire editions add an ultrabright, high-resolution AMOLED color display.

**COMPREHENSIVE BOAT** CONNECTIVITY

**COMPATIBLE WITH** GARMIN DEVICES1

24/7 HEALTH **MONITORING** AND SMART NOTIFICATIONS<sup>2</sup> **USE TRADITIONAL BUTTON CONTROLS** OR TOUCHSCREEN **INTERFACE** 

**BUILT-IN ACTIVITY PROFILES FOR** WATER AND LAND SPORTS



#### 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 CARTOGRAPHY



Never lose sight of where you are. Your quatix watch can support optional BlueChart® g3 charts.

#### 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-Link™ Lite app.

#### THE LINEUP quatix 7 Sapphire quatix 7 quatix 7X Solar 010-02540-61 010-02582-61 010-02541-61 **Bezel and Band** Stainless steel with blue silicone band Titanium with titanium band Titanium with titanium band Lens Material Power Glass™ Solar Charging Lens Corning® Gorilla® Glass DX Sapphire crystal **Display Type** MIP AMOLED MIP Connectivity BLUETOOTH®, ANT+®, Wi-Fi® BLUETOOTH®, ANT+®, Wi-Fi® BLUETOOTH®, ANT+®, Wi-Fi® Up to 28 days in smartwatch mode, with up to an Up to 18 days in smartwatch mode, Up to 16 days in smartwatch additional 9 days when solar charging; up to 89 hours **Battery Life** up to 57 hours in GPS mode mode, up to 42 hours in GPS mode in GPS mode, with up to an additional 33 hours when solar charging<sup>2</sup> **Water Rating** 10 ATM 10 ATM 10 ATM

# HANDHELDS

## GPSMAP° 73 AND GPSMAP° 79S

Boaters and watersport enthusiasts everywhere swear by GPS 73 and GPSMAP 79s 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. The GPS 73 includes SailAssist features, including virtual starting line, heading line, countdown timers and tack assist.





GPSMAP 73

SPSMAP 79S

## 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.



THE LINEUP		1		
THE LINEUP	GPS 73	GPSMAP 79s	GPSMAP 86s	GPSMAP 86i
	010-01504-00	010-2635-00	010-02235-01	010-02236-01
Easy-to-use Handheld	•	•	•	•
Floats	•	•	•	•
SailAssist	•			
Back-lit Buttons	•	•	•	•
Color Screen		•	•	•
Worldwide Basemap		•	•	•
Ability to Add Maps		•	•	•
Waypoints/Favorites/Locations	1,000	2,000	10,000	10,000
Routes	50	200	250	250
inReach® Satellite Technology¹				•
Memory/History		1.7 GB	16 GB	16 GB
Battery Life	18 hours	20 hours	40 hours	35 hours
Compass		Tilt- compensated 3-axis	Tilt-compensated 3-axis	Tilt-compensated 3-axis
Barometric Altimeter		•	•	•

# HANDHELDS

# GPSMAP® 86 SERIES HANDHELDS

Cast off confidently with GPSMAP® 86 handheld series - Premium, floating handhelds with a sunlight-readable 3" colour display. GPSMAP 86i and 86s both support optional BlueChart g3 charts with integrated Navionics® data. Wireless connectivity makes these handhelds a virtual extension of your onboard marine system, displaying boat data from compatible chartplotters and instruments.

They also function as a remote control for convenient operation of your Garmin autopilot and FUSION® marine products. GPSMAP 86i allow you to stay in touch anywhere with inReach® satellite communication capabilities¹, two-way text messaging and interactive SOS. Share your position using GPS-based location tracking.







**GPSMAP 86i** 





## **INREACH® MINI2 MARINE BUNDLE**

The inReach Mini2 Marine bundle puts the rugged, compact inReach Mini2 satellite communicator on your boat for 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. Off its mount, the internal, rechargeable lithium up to 14 days in default 10-minute tracking mode and up to 30 days with 30-minute tracking interval.





## GRID 20 REMOTE INPUT DEVICE

Part 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.

# 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. The 9-axis MEMS technology allows installation in nearly any orientation located away from magnetic interference. It's built to withstand bilge environments.

# MSC 10 MARINE SATELLITE COMPASS

Part no: 010-02407-00



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 (sold separately) via the NMEA 2000® network.

# **GNA 10 JOG LEVER ADAPTER**

Part no: 010-13007-00



# 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.

# **GARMIN USB CARD READER**

Part no: 010-02251-00



Save space on your helm with the compact, water-resistant  $SD^{\text{TM}}$  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.

# **GPS 24XD RECEIVER**

Part no: 010-02316-10



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.

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.





# **MFD Chartplotters**

GPSMAP 8424 GPSMAP 8422 GPSMAP 8417







Display size (diagonal)	24"	22"	17"
Display type and resolution (pixels)	WUXGA - 1920 x 1200	FHD - 1920 x 1080	WUXGA - 1920 x 1200
Touch- or keyed panel	Multitouch	Multitouch	Multitouch
GPS receiver	10 Hz GPS/GLONASS, external	10 Hz GPS/GLONASS, external	10 Hz GPS/GLONASS, external
Standard GPS antenna	External	External	External
Number of waypoints	5000	5000	5000
Number of routes	100	100	100
J1939 Support	Yes	Yes	Yes
Garmin SmartMode™	Yes	Yes	Yes
Digital Switching support	Yes	Yes	Yes
NMEA 2000 compatible	Yes	Yes	Yes
NMEA 0183 compatible	Yes	Yes	Yes
Garmin Marine Network compatible	Yes	Yes	Yes
Preloaded map	Worldwide Basemap	Worldwide Basemap	Worldwide Basemap
Garmin Navionics+/Vision+ Compatible	Yes	Yes	Yes
Auto Guidance+	Yes	Yes	Yes
ActiveCaptain <sup>™</sup> support	Yes	Yes	Yes
Sailing Features	Yes	Yes	Yes
Wi-Fi® and ANT™ wireless connectivity	Yes, built-in	Yes, built-in	Yes, built-in
GRID™ 20 (Garmin Remote Input Device) compatible	Yes	Yes	Yes
FLIR® and Axis® IP camera support	Yes	Yes	Yes
FUSION-Link™ support	Yes	Yes	Yes
Video input	1 BNC composite 1 HDMI (HDCP compliant)	1 BNC composite 1 HDMI (HDCP compliant)	1 BNC composite 1 HDMI (HDCP compliant)
Video output	1 HDMI	1 HDMI	1 HDMI
AIS and DSC support	Yes	Yes	Yes
Sonar module support	Yes	Yes	Yes
Supported frequency (sonar)	Dependent on optional sonar module	Dependent on optional sonar module	Dependent on optional sonar module
Transmit power	Dependent on optional sonar module	Dependent on optional sonar module	Dependent on optional sonar module
Panoptix <sup>™</sup> support	Yes	Yes	Yes
Data card slots	2 SD™ cards (requires optional card reader)	2 SD™ cards (requires optional card reader)	2 SD™ cards (requires optional card reader)
Water rating	IPX 7	IPX 7	IPX 7
Mounting options	Flat or Flush	Flat or Flush	Flat or Flush
Power supply	10-35 V	10-35 V	10-35 V
Typical current draw at 12 Vdc:	6.1 A	3.9 A	2.8 A
Connections	Built-in wireless connectivity, NMEA 2000: 1 port, NMEA 0183: 4 in and 2 out, Marine network: 4 ports, USB: 1 port, Video in: 1 BNC composite and 1 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, Marine network: 4 ports, USB: 1 port, Video in: 1 BNC composite and 1 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, Marine network: 4 ports, USB: 1 port, Video in: 1 BNC composite and 1 HDMI (HDCP compliant), Video out: 1 HDMI, J1939: 1 port

# Chartplotters and Combos

GPSMAP 8410

GPSMAP 8410xsv

GPSMAP 8412

GPSMAP 8412xsv

GPSMAP 8416

GPSMAP 8416xsv













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	FHD - 1920 x 1080	FHD - 1920 x 1080	FHD - 1920 x 1080
Touch- or keyed panel	Multitouch	Multitouch	Multitouch	Multitouch	Multitouch	Multitouch
GPS receiver	10 Hz GPS/GLONASS/Galileo	10 Hz GPS/GLONASS/Galileo	10 Hz GPS/GLONASS/Galileo	10 Hz GPS/GLONASS/Galileo	10 Hz GPS/GLONASS/Galileo	10 Hz GPS/GLONASS/Galileo
Standard GPS antenna	Internal (input for external)	Internal (input for external)	Internal (input for external)	Internal (input for external)	Internal (input for external)	Internal (input for external)
Number of waypoints	5000	5000	5000	5000	5000	5000
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	Worldwide Basemap	Worldwide Basemap	Worldwide Basemap	Worldwide Basemap	Worldwide Basemap	Worldwide Basemap
Garmin Navionics+/Vision+ Compatible	Yes	Yes	Yes	Yes	Yes	Yes
Auto Guidance+	Yes	Yes	Yes	Yes	Yes	Yes
ActiveCaptain <sup>™</sup> support	Yes	Yes	Yes	Yes	Yes	Yes
SailAssist	Yes	Yes	Yes	Yes	Yes	Yes
Wi-Fi® and ANT™ wireless connectivity	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	1 HDMI	1 HDMI	1 HDMI	1 HDMI	1 HDMI
Video output	1 HDMI	1 HDMI	1 HDMI	1 HDMI	1 HDMI	1 HDMI
AIS and DSC support	Yes	Yes	Yes	Yes	Yes	Yes
Sonar module support	Yes	Yes	Yes	Yes	Yes	Yes
Supported sonar frequencies		40kHz-250kHz CHIRP, 260/455/800/1200kHz CHIRP scanning (ClearVu and SideVu)		40kHz-250kHz CHIRP, 260/455/800/1200kHz CHIRP scanning (ClearVu and SideVu)		40kHz-250kHz CHIRP, 260/455/800/1200kHz CHIRP scanning (ClearVu and SideVu)
Transmit power		1 kW traditional, 1 kW CHIRP		1 kW traditional, 1 kW CHIRP		1 kW traditional, 1 kW CHIRP
Panoptix <sup>™</sup> support	Yes	Yes	Yes	Yes	Yes	Yes
Quickdraw Contours	Yes	Yes	Yes	Yes	Yes	Yes
Data card slots	2 micro SD	2 micro SD	2 micro SD	2 micro SD	2 micro SD	2 micro SD
Water rating	IPX 7	IPX 7	IPX 7	IPX 7	IPX 7	IPX 7
Mounting options	Bail, Flush or Flat	Bail, Flush or Flat	Bail, Flush or Flat	Bail, Flush or Flat	Bail, Flush or Flat	Bail, Flush or Flat
Power supply	10-32 V	10-32 V	10-32 V	10-32 V	10-32 V	10-32 V
Typical current draw at 12 Vdc:	2.0 A	2.7 A	2.4 A	3.1 A	3.5 A	4.2 A
Connections	Build-in wireless connectivity, NMEA 2000: 1 port, J1939, NMEA0183: 1 port, Marine Network: 2 ports, Video in: 1 BNC, 1 HDMI, Video out: 1 HDMI, USB	Build-in wireless connectivity, NMEA 2000: 1 port, J1939, NMEA0183: 1 port, Marine Network: 2 ports, Video in: 1 BNC, 1 HDMI, Video out: 1 HDMI, USB	Build-in wireless connectivity NMEA 2000: 1 port, J1939, NMEA0183: 1 port, Marine Network: 2 ports, Video in: 1 BNC, 1 HDMI, Video out: 1 HDMI, USB	Build-in wireless connectivity, NMEA 2000: 1 port, J1939, NMEA0183: 1 port, Marine Network: 2 ports, Video in: 1 BNC, 1 HDMI, Video out: 1 HDMI, USB	Build-in wireless connectivity, NMEA 2000: 1 port, J1939, NMEA0183: 1 port, Marine Network: 2 ports, Video in: 1 BNC, 1 HDMI, Video out: 1 HDMI, USB	Build-in wireless connectivity, NMEA 2000: 1 port, J1939, NMEA0183: 1 port, Marine Network: 2 ports, Video in: 1 BNC, 1 HDMI, Video out: 1 HDMI, USB

GPSMAP 1222xsv/1222 & GPSMAP 1022xsv/1022 GPSMAP 1223xsv/1223 & GPSMAP 923xsv/923 & GPSMAP 723xsv/723

ECHOMAP Ultra 102sv & 122sv ECHOMAP UHD 95sv & 75sv ECHOMAP UHD2 55cv & 75cv

ECHOMAP Plus 45cv







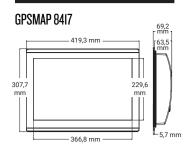


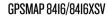


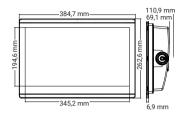


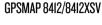
Display size (diagonal)	12" (1222xsv/1222) 10" (1022xsv/1022)	12" (1223xsv/1223) 9" (923xsv/923) 7" (723xsv/723)	10" (102sv/102) 12" (122sv/122)	9"	5" and 7"	4,3" (45cv)
Display type and resolution (pixels)	WXGA - 1280 x 800 (1222xsy/1222) WSVGA - 1024 x 600 (1022xsy/1022)	WXGA - 1280x800 (1223xsv/1223) WXGA - 1280x720 (923xsv/923) WSVGA - 1014x600 (723xsv/723)	1280 x800	WVGA - 800 x 480	WVGA - 800 x 480	QVGA - 272 x 480 (42cv)
Touch- or keyed panel	Keyed	Multitouch	Keyed Assist Multotouch	Keyed Assist Multotouch	Keyed	Keyed
GPS receiver	10 Hz GPS/GLONASS, internal	10 Hz GPS/GLONASS, internal	10 Hz	5 Hz GPS/GLONASS, internal	5 Hz GPS/GLONASS, internal	5 Hz GPS/GLONASS, internal
Standard GPS antenna	Internal (input for external)	Internal (input for external)	Internal (input for external)	Internal (input for external)	Internal (input for external)	Internal (input for external)
Number of waypoints	5000	5000	5,000	5000	5,000	5000
Number of routes	100	100	100	100	100	100
NMEA 2000 compatible	Yes	Yes	Yes	Yes	No	No
NMEA 0183 compatible	Yes	Yes	Yes	Yes	No	Yes
Garmin Marine Network compatible	Yes	Yes	Yes, with other 7" and 9" ECHOMAP UHD models and ECHOMAP Ultra models only	Yes, with other 7" and 9" ECHOMAP UHD models and ECHOMAP Ultra models only	Yes	No
Preloaded map	Worldwide Basemap	Worldwide Basemap	Worldwide Basemap	UK & Ireland BlueChart cartography	No	UK & Ireland BlueChart cartography
Garmin Navionics+/Vision+ Compatible	Yes	Yes	Yes	Yes	Yes	No
Auto Guidance+	Yes	Yes	Yes	Yes	Yes	No
ActiveCaptain™ support	Yes	Yes	Yes	Yes	Yes	No
SailAssist	Yes	Yes	Yes	Yes	Yes	No
Wi-Fi® wireless connectivity	Yes	Yes	Yes	Yes	Yes	No
ANT™ wireless connectivity	Yes	Yes	Yes	No	Yes	No
GRID™ 20 (Garmin Remote Input Device) compatible	Yes Yes	Yes	No	No	No	No
Wireless remote compatible	Yes	Yes	No	No	No	No
FLIR® camera support	Yes	Yes	No	No	No	No
FUSION-Link™ support	Yes	Yes	Yes	Yes	No	No
Video input	1 BNC	1 BNC Video Output: 1 HDMI 1243xsv/1243	No	No	No	No
AIS and DSC support	Yes	Yes	Yes	Yes	No	Yes
Traditional HD ID 77/200	Yes (xsv)	Yes (xsv)	Yes	Yes	Yes	Yes
Traditional HD ID 50/200	Yes (xsv)	Yes (xsv)	Yes	Yes	Yes	Yes
Traditional CHIRP	Yes (xsv)	Yes (xsv)	Yes	Yes	Yes	Yes
CHIRP ClearVü	Yes (xsv)	Yes (xsv)	Yes	Yes	Yes	Yes
CHIRP SideVü	Yes (xsv)	Yes (xsv)	Yes	Yes	No	No
Dual Channel CHIRP	No	No	No	No	No	No
Ultra High-Definition scanning sonar	No	Yes	Yes	Yes	Yes	No
Optional sonar support	Yes	Yes	Yes	No	No	No
Internal Sonar Sharing	Yes (xsv)	Yes (xsv)	Yes, with other 7" and 9" ECHOMAP UHD models and ECHOMAP Ultra models only	Yes, with other 7" and 9" ECHOMAP UHD models only	Yes	No
Transmit power	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)	Up to 500 W (RMS)
Panoptix <sup>™</sup> support	Yes	Yes	Yes	Yes	No	No
Preloaded Quickdraw Contours software	Yes	Yes	Yes	Yes	Yes	Yes
Data card slots	2 SD™ cards	2 MicroSD™ cards	2 MicroSD™ cards	1 MicroSD™ card	1 microSD™ card	1 MicroSD™ card
Water rating	IPX 7	IPX 7	IPX7	IPX 7	IPX7	IPX 7
Mounting options	Bail or Flush	Bail, Flush or Flat	Bail or Flush	Bail or Flush	Bail or Flush	Bail or Flush
Power supply	10-32 V	10-32 V	10-20 V	10-20 V	10-20 V	10-20 V
Typical current draw at 12 Vdc:	2.5 A	2.2 A (1223xsv/1223) 1.8 A (923xsv/923) 1.5 A (723xsv/723)	2.2 A (102sv) 2.5 A (122sv)	1.95 A	1.95 A	1.5 A
Connections	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 (1223xsv/1223), 1 port (922xsv/1223), Video in:1 BNC J1939 (1223xsv/1223)	NMEA 2000: 1 port, NMEA 0183: 1 in and 1 out Marine Network: 2 ports, for Internal Sonar Sharing (Ultra, UHD 75 and 95 only) and Panoptix	Built-in wireless connectivity, NMEA 2000: 1 port, NMEA 0183: 1 in and 1 out Marine Network: 1 port, for Internal Sonar Sharing (75 and 95 only) and Panoptix	NMEA 2000: 1 port NMEA 0183: 1 in and 1 out Marine Network: 1 port	NMEA 0183: 1 in and 1 out

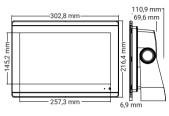
## GPSMAP 8424 GPSMAP 8422 69,2 mm 63,5 mm 578,9 mm 408,9 mm 349,9 mm 268,3 mm 5,7 mm 476,2 mm



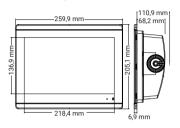




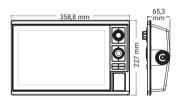




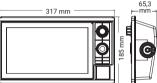
**GPSMAP 8410/8410XSV** 

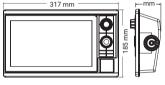


**GPSMAP 1222 SERIES** 

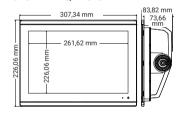


## **GPSMAP 1022 SERIES**

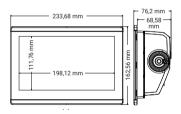




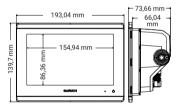
**GPSMAP 1223/1223XSV** 



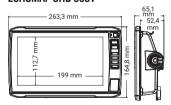
**GPSMAP 923/923XSV** 



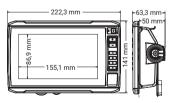
**GPSMAP 723/723XSV** 



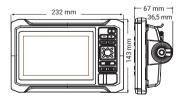
## ECHOMAP UHD 95SV



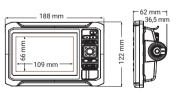
ECHOMAP UHD 75CV & 75SV



ECHOMAP UHD2 75CV



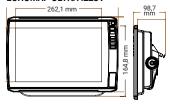
ECHOMAP UHD2 55CV



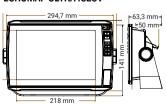
## **ECHOMAP PLUS 45CV**



## ECHOMAP ULTRA 122SV



## ECHOMAP ULTRA 102SV



# Instruments

**GHC 50 Autopilot Control** 

GMI 20

GNX Wind, GNX 20 & GNX 21

GNX 120

GNX 130







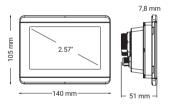




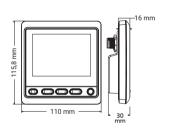


Bonded display	Yes	Yes	Yes	Yes	Yes
Display type	Color, QVGA	Color, QVGA	21-Inverted LCD, monochrome 20-Standard LCD, monochrome	Inverted LCD, monochrome	Inverted LCD, monochrome
Physical size (WxH)	5.5" x 4.1" x 2.0" (14.0 x 10.5 x 5.1 cm)	4.33" x 4.53" x 1.18" (110 mm x 115 mm x 30 mm)	110 x 115 x 30 mm (4.33" x 4.53" x 1.18")	180mm x 115mm (7.11" x 4.54")	248mm x 153mm (9.80" x 6.04")
Weight	247 g	247 g	230 g	380 g	820 g
Digit height	1.93" / 49 mm	1.93" / 49 mm	35mm \ 1.43" (GNX20/21)	51mm \ 2.0"	72mm \ 2.8"
LCD size (diagonal)	5"	4.0" / 102 mm	102mm \ 4.0"	159mm \ 6.3"	236mm \ 9.3"
LCD % of total size	39%	39%	40%	53%	53%
Number of big digits	3	3	3	4	4
Functions per page	1 to 4	1 to 4	1 to 3	1 to 3	1 to 3
Total data fields	50+	50+	50+	50+	50+
Background colors	RGB	RGB	RGB	RGB	RGB
Sunlight visible	Yes	Yes	Yes	Yes	Yes
Display update rate	1 Hz	1 Hz	Up to 8Hz	Up to 8Hz	Up to 8Hz
Operating temp	5°F to 158°F / -15°C to 70°C	5°F to 158°F / -15°C to 70°C	-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
Power consumption	3 W (Max light)	3 W (Max light)	350mW (no backlight) 450mW (no backlight)	360mW (no backlight) 400mW (no backlight)	360mW (no backlight) 400mW (no backlight)
Voltage range	9-16 V (from NMEA 2000)	9-16 V (from NMEA 2000)	9-16 V (from NMEA 2000)	9-16 V (from NMEA 2000)	9-16 V (from NMEA 2000)

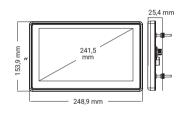
## GHC 50



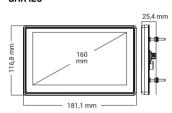
## GMI 20 & GNX 20/21/WIND



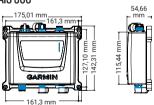
## **GNX 130**



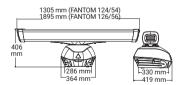
## **GNX 120**



## **AIS 800**



## **GMR FANTOM SERIES**



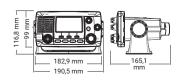
## **GMR XHD2 SERIES**



## **GMR DOME SERIES**



## VHF SERIES



# AIS and VHF



# **Radars**

Integral VHF antenna splitter

GMR Fantom 254/256 GMR Fantom 124/126

Yes

GMR 2526 / 1226 xHD2

GMR 2524 / 1224 / 424 xHD2

GMR Fantom 24x/18x GMR 24 xHD / 18 xHD

GMR 18HD+





GMR 56 / 54











Transmit Power	120W	120W	120W	25kW / 12kW / 6kW	25kW / 12kW / 6kW / 4kW	50W	4kW	4kW
Dimensions (diameter)	1928 mm (Fantom 126) 1328 mm (Fantom 124)	1928 mm (Fantom 126) 1328 mm (Fantom 124)	1928 mm (Fantom 56) 1328 mm (Fantom 54)	1923 mm	1310 mm	645 mm (Fantom 24x) 508 mm (Fantom 18x)	645 mm (24 xHD) 508 mm (18 xHD)	508 mm
Rotation Speed (revolutions/min)	24 & 48	24 & 48	24 & 48	24 & 48	24 & 48	24/48/60	24 & 48	24
Weight	23,6 kg (Fantom 126) 21,3 (Fantom 124)	23,6 kg (Fantom 126) 21,3 (Fantom 124)	23,6 kg (Fantom 56) 21,3 (Fantom 54)	29 kg	28,1	9,5 kg (Fantom 24x) 7,7 kg (Fantom 18x)	9,5 kg (24 xHD) 7,7 kg (18 xHD)	7,7 kg
Horizontal beamwidth	1.25° (Fantom 126) 1.8° (Fantom 124)	1.25° (Fantom 126) 1.8° (Fantom 124)	1.25° (Fantom 56) 1.8° (Fantom 54)	1.1°	1.8°	3.7° (Fantom 24x) 5.2° (Fantom 18x)	3.5° (24 xHD) 5.2° (18 xHD)	5.2°
Vertical beamwidth	23°	23°	23°	23°	23°	25°	25°	25°
Maximum/Minimum range	96 nm / 6 m (Fantom 126) 72NM / 6 m (Fantom 124)	96NM / 6 m (Fantom 126) 72NM / 6 m (Fantom 124)	96NM / 6 m (Fantom 56) 72NM / 6 m (Fantom 54)	96 NM / 20 m (2526) 72 NM / 20 m (1226)	96 NM / 20 m (2524) 72 NM / 20 m (1224/424)	48 nm/6 m	48 NM / 20 m	36 NM / 20 m
Waterproof according to standard	IPX6	IPX6	IPX6	IPX6	IPX6	IPX7	IPX7	IPX7
Power supply	10-32 V	10-32 V	10-32 V	10-32 V	10-32 V	10-32 V	11 - 35V	10.5-35 V
Power consumption (typical)	80 W	80W	80W	100W (25kW), 90W (12kW), 65W (6kW)	100W (25kW), 90W (12kW), 65W (6kW), 55W (4kW)	18.1-24.4 W (dependent on range setting)	30W	33.5W
Power consumption (standby)	10 W	10W	10W	20W	20W	4 W	12W	14W
Temperature range	-15 to 55C	-15 to 55C	-15 to 55C	-15 to 55C	-15 to 55C	-15 to 55C	-15 to 70C	-15 to 60C
Guard zone with alarm	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cable length	15 m	15 m	15 m	15 m	15 m	15 m	15 m	15 m
Polarization	Horizontal	Horizontal	Horizontal	Horizontal	Horizontal	Horizontal	Horizontal	Horizontal
Trails	Heading-corrected, Adjustable	Heading-corrected, Adjustable	Heading-corrected, Adjustable	Adjustable	Adjustable	Heading-corrected, Adjustable	Adjustable	Adjustable
Dual Range	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No

# **Fishfinders**

STRIKER Vivid 9sv

STRIKER Vivid 7cv/sv

STRIKER Vivid 5cv

STRIKER Vivid 4cv



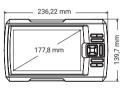






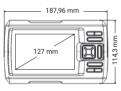
Display Size (diagonal)	9.0"	7.0"	5.0"	4.0"
Display Resolution	800 x 480 WVGA	800 x 480 WVGA	800 x 480 WVGA	480 x 320 HVGA
Internal High-sensitivity GPS	Yes	Yes	Yes	Yes
Built-in Quickdraw	Yes	Yes	Yes	Yes
Built-in Wi-Fi®	Yes	Yes	No	No
CHIRP Traditional Sonar	Yes	Yes	Yes	Yes
Dual Frequency (50/200 kHz)	Yes	Yes	Yes	Yes
Dual Beam (77/200 kHz)	Yes	Yes	Yes	Yes
CHIRP ClearVü	Yes	Yes	Yes	Yes
CHIRP SideVü	Yes	No	No	No
Included Transducer	GT52HW-TM (High Wide CHIRP/ ClearVü/SideVü)	GT20-TM (CHIRP/ClearVü) or GT52HW-TM (High Wide CHIRP/ClearVü/SideVü)	IRP/ClearVü) or GT52HW-TM GT20-TM	
Transmit Power - Included Transducer	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
Frequencies Supported (kHz)	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)
Maximum Depth Capabilities with Included Transducer <sup>1</sup>	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)
Waypoints	5,000	5,000	5,000	5,000
Audible Alarms	Yes	Yes	Yes	Yes
User Data Sharing Cable Compatible	Yes	Yes	Yes	Yes
Water Temperature Log/Graph	Yes	Yes	Yes	Yes
GPS Speed	Yes	Yes	Yes	Yes
Flasher	Yes	Yes	Yes	Yes

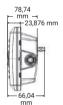
## STRIKER VIVID 9SV



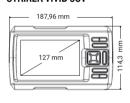


## STRIKER VIVID 7CV/SV





## STRIKER VIVID 5CV



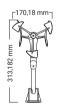


## STRIKER VIVID 4CV





## **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

Unit dimensions, WxHxD	610 x 345 mm	H=1180 mm	610 x 345 mm	170 x 90 x 50 mm
Weight	260 g	320 g	350 g	196 g
Cable length	25 m	25 m	N/A	NMEA 2000 (2m) Nexus network (5m)
Waterproof	IPX6	IPX6	IPX6	IPX6
Temp range	From -15°C to 70°C			
Voltage range	9-16V	9-16V	N/A	9-16V
Power usage	0.33W	0.33W	Solar powered	0.85W
Compass safe distance	N/A	N/A	N/A	0.1m
Accuracy angle	Better than ±1.5°	Better than ±1.5°	Better than ±1.5°	N/A
Speed	Better than ±3%	Better than ±3%	Better than ±3%	N/A
NMEA 2000 Load Equivalency Number (LEN)	N/A	N/A	N/A	4
Wireless connectivity	No	No	Yes	No

Sonar Modules		1			
oonar wodales	GSD 24	GSD 25	GSD 26	GCV 10	GCV 20
		6 P 010		3 Q Q Q <u>3</u>	7 H H H 9
Physical size (WxHxD)	275 x 82 x 204 mm	192 x 66 x 251 mm	363 x 100 x 274 mm	192 x 66 x 251 mm	192 x 66 x 251 mm
White line	Yes	Yes	Yes	No	No
Waterproof according to standard	IPX7	IPX7	IPX7	IPX7	IPX7
Ultrascroll	Yes	Yes	Yes	No	No
Compatible with Dual Frequency transducers	Yes	Yes	Yes	No	No
Autogain technology	Yes	Yes	Yes	Yes	Yes
Power supply	10-35 V	10-35 V	10-35 V	10-35 V	10-35 V
Power consumption	2-29 W	2-29 W	5-94 W	10.5 W	10.5W
Max. depth1	5000 ft	ClearVü: 750 ft SideVü: 500 ft Traditional: 5,000 ft	10 000 ft	ClearVü: 750 ft SideVü: 500 ft	ClearVü: 750 ft SideVü: 500 ft
Fish symbol ID	Yes	Yes	Yes	No	No
Frequency	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	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	SideVü/ClearVü CHIRP: 455/800/1200 kHz
Max. transducer angle Dual Frequency	45/10°	45/10°	45/10°	n/a	n/a
Depth Controlled Gain	Yes	Yes	Yes	No	No
See Thru compatible	Yes	Yes	Yes	No	No
Output power	Up to 2 kW	Up to 1 kW	Up to 3 kW	500 W	500 W
Garmin Marine Network compatible	Yes	Yes	Yes	Yes	Yes

Cameras GC14 Marine Camera GC200 Marine IP Camera GC100 Marine Camera







Video Resolution	976(H) x 582(V)	Up to 1920 x 1080P1	720p
Low-light vision	Up to 10 Meters	Up to 30 Meters	Up to 3 Meters
Water rating	IPX7	IPX7	IPX7
One-button startup			•
Pair multiple camera		•	•
Connection to Chartplotter	Composite Video	Ethernet	Wi-Fi®
Hardwired Power	12V (9-18VDC)	12V and POE (9-18VDC or PoE)	12V (10-30VDC)
Compass Safe Distance	6 1/8" (155 mm)		4" (100 mm)
Operating temperature	-10 to 50°C (from 14 to 122°F)	-20 to 60°C (from -4 to 140°F)	-20 to 60°C (from -4 to 140°F)
Viewing angle, DxHxV(°)	95.0° x 69.0° x 52.0°	123° x 99° x 74°	183° x 160° x 90°
Weight	205 g	520 g	50 g
Unit dimensions	5.1 x 4.4 cm (2.0" x 1.7")	8.9 x 8.3 cm (3.5" x 3.25")	5.0 x 4.0 x 2.8 cm (2.0" x 1.6" x 1.1")
Power consumption	80mA (IR Off), 170mA (IR On)	210mA (IR Off), 370mA (IR On)	10 W

# Handhelds and Wearables



quatix 7



GPSMAP 276Cx



GPS 73



GPSMAP 79s



inReach Mini Marine Bundle



GPSMAP 86i



GPSMAP 86s

		The state of the s				am s	
Number of waypoints	1,000	10,000	1,000	2,000	500	10,000	10,000
Internal map memory	32 MB	8.0 GB	No	1.7 GB	No	16GB	16GB
Number of routes	30	250	50	250	20	250	250
Basemap, preprogrammed map	Yes	Worldwide basemap	No	Worldwide basemap	No	Worldwide basemap	Worldwide basemap
Additional map options	BlueChart g3	Bluechart g3, City Navigator, topo, topo 24k	No	BlueChart g3, City Navigator, Pro, Pro v2 and Prime outdoor maps	No	Bluechart g3, City Navigator, Topo maps- and Prime outdoor maps	Bluechart g3, City Navigator, Topo maps- and Prime outdoor maps
Battery life	7: 28 days (expedition GPS activity); up to 36 hours (GPS mode); up to 14 days (smartwatch mode) 7X Solar: 46 days plus 10 days' (expedition GPS activity); up to 60 hours	up to 16 hours (lithium-ion); up to 8 hours (AA batteries)	18+ hours on 2 AA batteries (not included)	19 hours (2 AA)	up to 90 hours at 10-minute tracking (default) up to 35 hours at 10-minute tracking with 1-second logging up to 24 days at 30-minute tracking power save mode up to 1 year when powered off	35 hours in 10-minutes tracking mode Up to 200 hours (Expedition mode)	Up to 40 hours (Standard mode) Up to 200 hours (Expedition mode)
Display size	1,3" (quatix 7, quatix 7 Sapphire) 1,4" (quatix 7X Solar)	5" diagonal	2.6" diagonal	3" diagonal	1.3" diagonal	3" diagonal	3" diagonal
Display type	Transflective MIP color (quatix 7, quatix 7X Solar) AMOLED (quatix 7 Sapphire)	TFT (Transflective)	TFT (Transflective)	Transflective, 65K colour TFT	sunlight-readable, monochrome, transflective memory-in-pixel (MIP)	Transflective, 65K colour TFT	Transflective, 65K colour TFT
Area calculation	Yes	Yes	Yes	Yes	No	Yes	Yes
Display resolution pixels (HxW)	7: 260 x 260 7X Solar: 280 x 280	800 x 480	160 x 128	240 x 400	128 x 128	240 x 400	240 x 400
Standard GPS antenna	EXO™ antenna	Internal	Internal	Integral quad helix	Integral quad helix	Quad helix	Quad helix
Bluetooth®	BLUETOOTH® ANT+®, Wi-Fi®	Bluetooth / WiFi	No	No	Yes	Yes	Yes
TracBack function	Yes	Yes	Yes	Yes	No	Yes	Yes
Number of track points	10,000	20,000	10,000	10,000	10,000	10,000	10,000
Weight	7: 83 g 7X Solar: 82 g	450 g (litium), 415 g (AA)	232,4 g	282 g	100 g	272 g	272 g
Alarm	Yes	Yes	Yes	Yes	No	Yes	Yes
Waterproof according to standard	10 ATM	IPX7	IPX7	IPX7	IPX7	IPX7	IPX7
Physical size in mm (HxWxD)	7: 47 x 47 x 14.7 7X Solar: 51 x 51 x 14.9	191 x 94 x 43 mm	157 x 69 x 30 mm	174 x 67 x 42	51.7 x 99.0 x 26.1 mm	178 x 68 x 44 mm	178 x 68 x 44 mm
Separate Serial & USB interfaces	No	Yes	Yes	Yes	No	Yes	Yes
Storage of cartography	No	microSD memory card	No	microSD memory card	No	microSD memory card	microSD memory card
Backlit display	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Input for external antenna	No	Yes	No	Yes	No	No	No
WAAS/EGNOS compatible	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Integral electronic compass	Yes	Yes	No	Yes	No	Yes	Yes
Integral barometric altimeter	Yes	Yes	No	Yes	No	Yes	Yes
Automatic route calculation	No	Yes, with City Navigator	No	Yes, with City Navigator	No	Yes (with optional mapping for detailed roads)	Yes (with optional mapping for detailed roads)
Calendar for hunting/fishing times	No	Yes	Yes	Yes	No	Yes	Yes
Solar & lunar calendar	Yes	Yes	Yes	Yes	No	Yes	Yes
Area waypoints	Yes	Yes	Yes	Yes	No	Yes	Yes
Tidal information	Yes	Yes	No	Yes	No	Yes	Yes
Power supply (external)	No	8-36 V	8-36 V	8-36 V	Indluded bare wire cable: 10-30V Unit: 5 V Micro USB	Indluded bare wire cable: 10-30V Unit: 5 V Micro USB	Indluded bare wire cable: 10-30V Unit: 5 V Micro USB
Waypoint icons	No	Yes	Yes	Yes	No	Yes	Yes
NMEA compatible	No	Yes (NMEA 0183)	Yes (NMEA 0183)	Yes (NMEA 0183)	No	Yes (NMEA 0183)	Yes (NMEA 0183)
Camera	No	No	No	No	No	No	No
Picture viewer	No	No	No	Yes	No	Yes	Yes
Floats	No	Yes	Yes	Yes	No	Yes	Yes

# **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	Cruising applications only; for single engine outboard (150hp and below) vessels less than 25' long.  Up to 150 cc	Compact Reactor 40 Hydrauilic Autopilot Starter Pack	1.0L Pump	Reactor 40 Compact ECU 1.0L Pump	3 or 5 ORB Male to 1/4" NPT female adapters     Hydraulic hose - machine-crimped or field replaceable fittings. Minimum 1000psi     Hydraulic T-connectors - varies by vessel     Hydraulic Shut-off valves - varies by vessel
Hydraulic	Cruising applications only; for single engine outboard (150hp and below) vessels less than 25' long.  Up to 150 cc	Compact Reactor 40 Hydraulic Autopilot with GHC 50 Pack	1.0L Pump	Reactor 40 Compact ECU 1.0L Pump Shadow Drive	3 or 5 ORB Male to 1/4" NPT female adapters     Hydraulic hose - machine-crimped or field replaceable fittings. Minimum 1000psi     Hydraulic T-connectors - varies by vessel     Hydraulic Shut-off valves - varies by vessel
Hydraulic	Cruising applications only; for single engine outboard (150hp and below) vessels less than 25' long.  Up to 150 cc	Compact Reactor* 40 with Pump, GHC 50* and Shadow Drive Technology Pack	1.0L Pump	Reactor 40 Compact ECU 1.0L Pump Shadow Drive GHC 50	3 or 5 ORB Male to 1/4" NPT female adapters     Hydraulic hose - machine-crimped or field replaceable fittings. Minimum 1000psi     Hydraulic T-connectors - varies by vessel     Hydraulic Shut-off valves - varies by vessel
Hydraulic	Single-cylinder applications. Up to 200 cc	Reactor 40 Hydraulic Autopilot	GHP 1.2L Pump	Reactor 40 ECU 10 Shadow Drive GHC 50	010-00705-64: GHP 1.2L Pump      3 or 5 ORB Male to 1/4" NPT female adapters     Hydraulic hose - machine-crimped or field     replaceable fittings. Minimum 1000psi     Hydraulic T-connectors - varies by vessel     Hydraulic Shut-off valves - varies by vessel
Hydraulic	Dual-cylinder applications. 200 - 300 cc	Reactor 40 Hydraulic Autopilot	GHP 2.0L Pump	Reactor 40 ECU 10 Shadow Drive With / Without GHC 50	010-00705-63: GHP 2.0L Pump      3 or 5 ORB Male to 1/4" NPT female adapters     Hydraulic hose - machine-crimped or field     replaceable fittings. Minimum 1000psi     Hydraulic T-connectors - varies by vessel     Hydraulic Shut-off valves - varies by vessel
Hydraulic	Premium, recommended option for most hydraulic steering installations, including Verado®, power assist, and total cylinder volumes 100 - 370 cc. Recommended for high use, rougher waters, high performance, and slow speed applications. Also recommended for Evinrude G2 Dynamic Power Steering systems.	Reactor" 40 Hydraulic Core Pack with SmartPump" v2	SmartPump v2	Reactor 40 SmartPump v2 Shadow Drive With / Without GHC 50	3 or 5 OBB Male to 1/4" NPT female adapters Hydraulic hose - machine-crimped or field replaceable fittings. Minimum 1000psi Hydraulic T-connectors - varies by vessel Hydraulic Shut-off valves - varies by vessel
Mechanical Steering	Total vessel displacements up to 28,500 pounds, with very low backdrive force required	Reator 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  Mechanical Steering		Solenoid/Retrofit Core		ECU 12	
	backdrive force required	Solenoid/Retrofit Core Pack  Reator 40 Mechanical/ Solenoid/Retrofit Core	Actuator  Class B Compact	ECU 12 GHC 50 Reactor 40 ECU 12	has rudder feedback included 010-12029-00: Class B linear actuator;
Mechanical Steering	backdrive force required  Total vessel displacements up to 48,400 pounds	Solenoid/Retrofit Core Pack  Reator 40 Mechanical/ Solenoid/Retrofit Core Pack  Reator 40 Mechanical/ Solenoid/Retrofit Core	Class B Compact Linear Actuator  Class B Linear	ECU 12 GHC 50 Reactor 40 ECU 12 GHC 50 Reactor 40 ECU 12	has rudder feedback included  010-12029-00: Class B linear actuator; has rudder feedback included  010-11573-00: Class B linear actuator;
Mechanical Steering  Mechanical Steering	Total vessel displacements up to 48,400 pounds  Total vessel displacements from 48,000 to 79,000 pounds	Solenoid/Retrofit Core Pack  Reator 40 Mechanical/ Solenoid/Retrofit Core Pack  Reator 40 Mechanical/ Solenoid/Retrofit Core Pack  Reator 40 Mechanical/ Solenoid/Retrofit Core Pack	Actuator  Class B Compact Linear Actuator  Class B Linear Actuator  Third-party Drive	ECU 12 GHC 50 Reactor 40 ECU 12 GHC 50 Reactor 40 ECU 12 GHC 50	has rudder feedback included  010-12029-00: Class B linear actuator; has rudder feedback included  010-11573-00: Class B linear actuator; has rudder feedback included  Third-party drive unit 010-11533-00: Actuator Motor Cable, 010-11829-00: GRF 10 Rudder sensor, or 010-
Mechanical Steering  Mechanical Steering  Mechanical Steering	Total vessel displacements up to 48,400 pounds  Total vessel displacements from 48,000 to 79,000 pounds  Sailboats with non-Garmin drive units  SeaStar Optimus, ZF Pod Drive, Yanmar, Evinrude G2 Intelligent	Solenoid/Retrofit Core Pack  Reator 40 Mechanical/ Solenoid/Retrofit Core Pack  Reactor 40 Steer-by-wire	Actuator  Class B Compact Linear Actuator  Class B Linear Actuator  Third-party Drive	Reactor 40 ECU 12 GHC 50	has rudder feedback included  010-12029-00: Class B linear actuator; has rudder feedback included  010-11573-00: Class B linear actuator; has rudder feedback included  Third-party drive unit 010-11533-00: Actuator Motor Cable, 010-11829-00: GRF 10 Rudder sensor; or 010-
Mechanical Steering  Mechanical Steering  Mechanical Steering	Total vessel displacements up to 48,400 pounds  Total vessel displacements from 48,000 to 79,000 pounds  Sailboats with non-Garmin drive units  SeaStar Optimus, ZF Pod Drive, Yanmar, Evinrude G2 Intelligent Piloting System (including iDock)	Solenoid/Retrofit Core Pack  Reator 40 Mechanical/ Solenoid/Retrofit Core Pack  Reactor 40 Steer-by-wire Standard Core Pack  Reactor 40 Steer-by-wire Core Pack for Yamaha	Actuator  Class B Compact Linear Actuator  Class B Linear Actuator  Third-party Drive Unit	Reactor 40 ECU 12 GHC 50  Reactor 40 ECU 50  Reactor 40 Autopilot Gateway	has rudder feedback included  010-12029-00: Class B linear actuator; has rudder feedback included  010-11573-00: Class B linear actuator; has rudder feedback included  Third-party drive unit 010-11533-00: Actuator Motor Cable, 010-11829-00: GRF 10 Rudder sensor; or 010-
Mechanical Steering  Mechanical Steering  Mechanical Steering  Steer by Wire	Total vessel displacements up to 48,400 pounds  Total vessel displacements from 48,000 to 79,000 pounds  Sailboats with non-Garmin drive units  SeaStar Optimus, ZF Pod Drive, Yanmar, Evinrude G2 Intelligent Piloting System (including iDock)  Yamaha Helm Master  Volvo IPS or Sterndrive (C3 or newer Volvo EVC Systems)	Solenoid/Retrofit Core Pack  Reator 40 Mechanical/ Solenoid/Retrofit Core Pack  Reactor 40 Steer-by-wire Standard Core Pack  Reactor 40 Steer-by-wire Core Pack for Yamaha Helm Master  Reactor 40 Steer-by-wire	Actuator  Class B Compact Linear Actuator  Class B Linear Actuator  Third-party Drive Unit  Gateway Included	Reactor 40 ECU 12 GHC 50  Reactor 40 Autopilot Gateway Autopilot Gateway Autopilot Gateway	has rudder feedback included  010-12029-00: Class B linear actuator; has rudder feedback included  010-11573-00: Class B linear actuator; has rudder feedback included  Third-party drive unit 010-11533-00: Actuator Motor Cable, 010-11829-00: GRF 10 Rudder sensor, or 010-
Mechanical Steering  Mechanical Steering  Mechanical Steering  Steer by Wire  Steer by Wire	Total vessel displacements up to 48,400 pounds  Total vessel displacements from 48,000 to 79,000 pounds  Sailboats with non-Garmin drive units  SeaStar Optimus, ZF Pod Drive, Yanmar, Evinrude G2 Intelligent Piloting System (including iDock)  Yamaha Helm Master  Volvo IPS or Sterndrive (C3 or newer Volvo EVC Systems) Aquamatic Sterndrive DPI	Solenoid/Retrofit Core Pack  Reator 40 Mechanical/ Solenoid/Retrofit Core Pack  Reactor 40 Steer-by-wire Standard Core Pack  Reactor 40 Steer-by-wire Core Pack for Yamaha Helm Master  Reactor 40 Steer-by-wire Core Pack for Volvo-Penta  Reactor 40 Steer-by-wire	Actuator  Class B Compact Linear Actuator  Class B Linear Actuator  Third-party Drive Unit  Gateway Included	Reactor 40 ECU 12 GHC 50  Reactor 40 Autopilot Gateway GHC 50  Reactor 40 Autopilot Gateway GHC 50  Reactor 40 Reactor 40 Autopilot Gateway GHC 50  Reactor 40	has rudder feedback included  010-12029-00: Class B linear actuator; has rudder feedback included  010-11573-00: Class B linear actuator; has rudder feedback included  Third-party drive unit 010-11533-00: Actuator Motor Cable, 010-11829-00: GRF 10 Rudder sensor, or 010-
Mechanical Steering  Mechanical Steering  Mechanical Steering  Steer by Wire  Steer by Wire  Steer by Wire	Total vessel displacements up to 48,400 pounds  Total vessel displacements from 48,000 to 79,000 pounds  Sailboats with non-Garmin drive units  SeaStar Optimus, ZF Pod Drive, Yanmar, Evinrude G2 Intelligent Piloting System (including iDock)  Yamaha Helm Master  Volvo IPS or Sterndrive (C3 or newer Volvo EVC Systems) Aquamatic Sterndrive DPI  Viking VIPER  Constant running hydraulic pump systems with solenoid autopilot	Solenoid/Retrofit Core Pack  Reator 40 Mechanical/ Solenoid/Retrofit Core Pack  Reator 40 Mechanical/ Solenoid/Retrofit Core Pack  Reator 40 Mechanical/ Solenoid/Retrofit Core Pack  Reator 40 Steer-by-wire Standard Core Pack  Reactor 40 Steer-by-wire Core Pack for Yamaha Helm Master  Reactor 40 Steer-by-wire Core Pack for Volvo-Penta  Reactor 40 Steer-by-wire Core Pack for Volvo-Penta  Reactor 40 Steer-by-wire Core Pack for Viking Viper  Reator 40 Mechanical/ Solenoid/Retrofit Core	Actuator  Class B Compact Linear Actuator  Class B Linear Actuator  Third-party Drive Unit  Gateway Included  Gateway Included  Third-party Solenoid	Reactor 40 ECU 12 GHC 50  Reactor 40 GHC 50  Reactor 40 Autopilot Gateway GHC 50  Reactor 40 GHC 20	has rudder feedback included  010-12029-00: Class B linear actuator; has rudder feedback included  010-11573-00: Class B linear actuator; has rudder feedback included  Third-party drive unit 010-11533-00: Actuator Motor Cable, 010-11829-00: GRF 10 Rudder sensor, or 010- 11532-00 + third party rudder sensor.

The Wireless Remote with gesture control is an optional accessory compatible with all Garmin autopilots listed; requires GHC50 or supported chartplotters.



## TIME TO USE YOUR GARMIN MARINE ELECTRONICS

To make using and understanding your Garmin electronics as easy as possible, we offer several online resources where you can watch informative videos that show our newest products in action. You can find videos that clearly explain and demonstrate everything from installation and set-up to step-by-step "How To Use" guidance that will help you get the most enjoyment and best performance from your Garmin electronics.



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# **QUESTIONS?**

If you still haven't received the answer or explanation you need, then you can always contact one of our knowledgeable representatives by email or phone.



Garmin (Europe) Ltd Liberty House Hounsdown Business Park Southampton SO40 9LR United Kingdom



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A R Peachment Ltd	Norfolk	Brundall	01603 714077
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K7 Specialist Engineering	Cumbria	Windermere	07399 946205
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KM Electronics	Suffolk	Lowstoft	01502 569079
Knight Marine Electronics	Hampshire	Sarisbury Green	
Landau UK Ltd	Hampshire	Swanwich	01489 577588
Lindon Lewis	Middlesex	Shepperton	01932 247427
Lumacon T/A Aztec Marine	Hampshire	Hamble	023 8045 5112
Mantsbrite	Essex	Maldon	01621 853003
Maricom	Hampshire	Swanwick	01489 583531
MEI LTD	Hampshire	Portsmouth	023 9232 6366
Osprey Technical	Hampshire	Hamble	023 8045 5606
Platinum Marine Electronics & A	/ Dorset	Poole	01202 237585
Specialist Ltd	5	DI II	01750 007711
Plymouth Marine Electronics Ltd PSI Marine	Devon Kent	Plymouth	01752 227711
PSI Marine PSI Marine	Surrey	Chatham Chertsey	01622 751290 01622 751290
PTMarine Ltd	East Sussex	Shoreham-by-	07763 101960
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Roger Upham Marine Electronics	West Sussex	Chichester	01243 514511
Smye Rumsby	Kent	Dover	01304 248900
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The Vital Spark Marine	Hampehira	tyne Hamble	023 81849677
The Vital Spark Marine Electronics	Hampshire	паные	023 01049077
Wroath Marine	Isle Of Wight	Cowes	01983 281467
Widamie	isic or wight	OOWC3	01700 201407
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PC Boat Sales Ltd	Jersey	St Hellier	01534 737537
FastCraft Marine Services Ltd	Guernsey	St Peter Port	07781 130935
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Caley Marina	Inverness-shire		01463 236539
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MB Marine Electrics & Electronic		Ardossan	01294 602003
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Rowlands Marine Electronics Ltd	Gwynedd	Pwllheli	01758613193
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