

2018

Raymarine®



SIMPLY SUPERIOR™



SIMPLY SUPERIOR

Raymarine products are engineered to deliver the very best in visual navigation information and with a legacy of marine technology spanning over 80 years, we are renowned today for ease-of-use, rugged design, and reliability.

At Raymarine, we are constantly innovating to deliver high-performance sensors and intelligent navigation systems so your time on the water is stress-free and fun. We are committed to you with an industry-leading warranty and worldwide service network. Whether you fish, sail, or cruise you can get underway with the confidence of Raymarine on board.





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SPECIFICATIONS

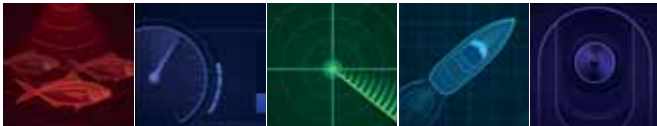
66	General Specification Information
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LIGHTHOUSE 3 INTUITIVE AND POWERFUL OS

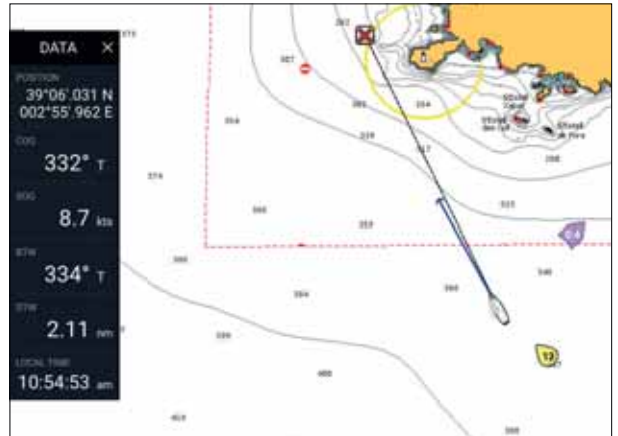
The easy-to-use operating system inside every Raymarine multifunction display, LightHouse™ puts you in command with a fluid touch-screen or HybridTouch™ user experience. LightHouse lets you navigate with the best charts and makes navigating as simple as using a smartphone.





HOME SCREEN

The LightHouse 3 home screen offers bold and simple app icons. Customize the home screen with your favourite apps.



YOUR DATA – JUST A SWIPE AWAY

Swipe the side of the display to reveal the Side Bar data display. The Side Bar also appears automatically if a GOTO command is initiated.



TAKE COMMAND

LightHouse 3's easy-to-use interface will put you in complete command with just a few touches.



BEAUTIFUL DATA

Drag and drop your databoxes anywhere on your screen. Choose from 4 different size options and up to 14 different data types.



NEW CHART MODES

Uncluttered menus with quick access to Simple, Detailed, and Fishing chart modes.



SMART CONTEXT MENUS

Put frequently used functions and nearby chart objects right at your fingertips.

LIGHTHOUSE 3 NETWORKING

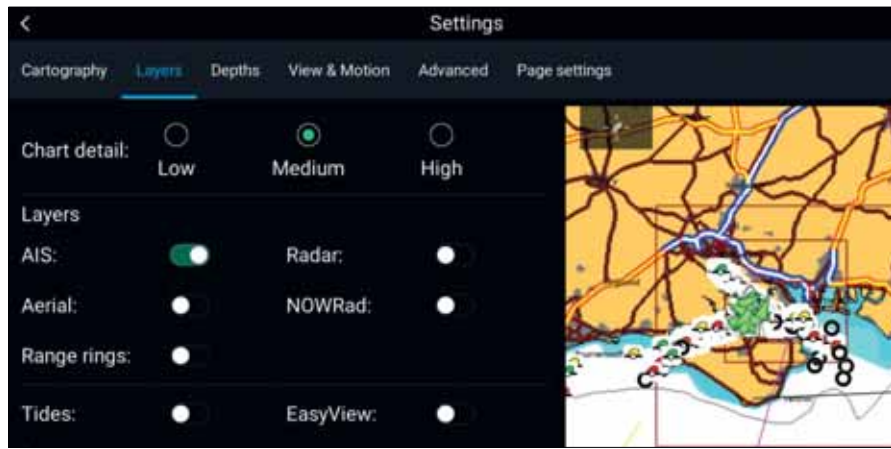
The LightHouse 3 OS and Axiom are expandable and support the full range of Raymarine accessories, including Quantum radar, CHIRP Sonar, FLIR thermal cameras, audio integration, instruments, cameras, and Evolution autopilot. Standard Wi-Fi connectivity allows connection to the latest Raymarine apps for tablets and smartphones.





USER PROFILES

LightHouse 3 User Profiles saves your personal home screen and configuration preferences.



LIGHTHOUSE LIVEVIEW MENU™ CONTROLS

Easily customise the chart and see the navigation display change in real time.

REGULAR LIGHTHOUSE UPDATES

LightHouse is an expanding user interface with regular downloadable FREE updates.

AXIOM® MULTIFUNCTION

The Axiom® family of navigation displays are rugged, all-glass touch screens available in 7.0, 9.0, and 12.1-inch display sizes and are powered by the intuitive LightHouse 3 operating system. Equipped with a blazing fast quad core processor, Axiom delivers smooth tablet-like operation and stunning RealVision™ Sonar imagery. Engineered to expand, Axiom displays support Raymarine's full range of sensors and add-on modules, including Quantum radar, CHIRP sonar modules, Evolution autopilots and FLIR thermal night vision. Standard Wi-Fi connectivity allows connection to the latest Raymarine apps for tablets and smartphones.

Choose a base model Axiom for GPS navigation or choose an Axiom with integrated RealVision 3D sonar. Axiom with RealVision 3D features life-like 3D sonar imagery plus DownVision, SideVision, and conventional CHIRP sonar integrated into a single RealVision 4-in-one transducer

7"

9"

12"



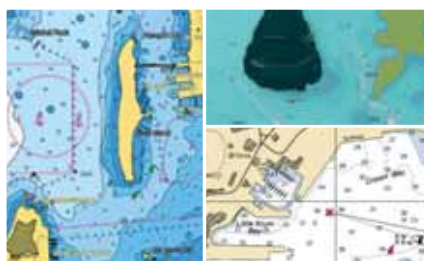


**WINNER OF THE PRESTIGIOUS
MIAMI BOAT SHOW INNOVATION AWARD**



LIGHTHOUSE 3 OS

Fast, fluid, and easy to learn. An uncluttered interface that is easily personalised for your style of navigating.



SUPPORT FOR THE BEST CHARTS

From Navionics and C-MAP. Or choose LightHouse vector and raster charts from leading mapmakers like NV Digital, Solteknik HB and more...



FLIR THERMAL VISION

Combined with the FLIR M132 or M232 night vision cameras, ClearCruise™ thermal video analytics technology actively monitors the scene and provides alerts when any non-water objects enter the camera's field of view.



RUGGED ALL-GLASS DISPLAY

Optimised for flush or surface mounting. Sleek button-less design with swipe to power control.

POWERFUL 4 CHANNEL SONAR

Supports RealVision 3D, CHIRP DownVision, SideVision, High Frequency CHIRP with 600 Watt (50/200 kHz) sonar.

WIDE SPECTRUM CHIRP

Transmits on 60 different frequencies for the most life-like sonar imagery and simply the best fish targeting—hands down!

EASY FISH IDENTIFICATION

Easily identify structure and locate fish with the life-like clarity of RealVision™ 3D sonar.



GYRO STABILISED SONAR TECHNOLOGY

Gyro stabilisation compensates for boat movement, delivering life-like 3D sonar imagery.

ALL-IN-ONE TRANSDUCER

RealVision 3D Transducers combine CHIRP DownVision, CHIRP SideVision, High Frequency CHIRP, and RealVision 3D into a single transducer housing.



AXIOM PRO

AXIOM® PRO HYBRIDTOUCH™ DISPLAYS


Axiom Pro is engineered for captains that want it all. Available with RealVision 3D, 1kw CHIRP sonar, and Raymarine HybridTouch control, Axiom Pro is the new standard for "all-in-one" multifunction devices. And with a blazing fast quad core processor, a super bright high-definition IPS display, and the smart LightHouse OS, Axiom Pro delivers a fluid and intuitive navigation experience. Axiom Pro is easy to expand into an advanced navigation network that includes multiple Raymarine Axiom displays, CHIRP radar, Evolution autopilot, FLIR thermal night vision technology, and more.

- 9"
- 12"
- 16"







Axiom Pro 9, 12, and 16



INTUITIVE CONTROL

With Raymarine HybridTouch you can enjoy simple touch screen interaction or take control of Axiom Pro from its keypad and multi-function rotary control. The choice is yours.

BLAZING FAST

Quad core processor delivers instantaneous response and the ability to run multiple apps simultaneously without any slowdowns.

BOLD AND BRIGHT

Optical bonding technology and high definition IPS display panels give you stunning colour, clarity, and contrast in all lighting conditions. Axiom Pro looks great even through polarised sunglasses.

HYBRIDTOUCH™

Control Axiom Pro from its multi-touch screen, its buttons and rotary knob, or any combination of both. This choice is yours.

CUSTOM KEY

Get instant access to your favorite function with user-programmable Custom Key.

LIGHTHOUSE 3 OS

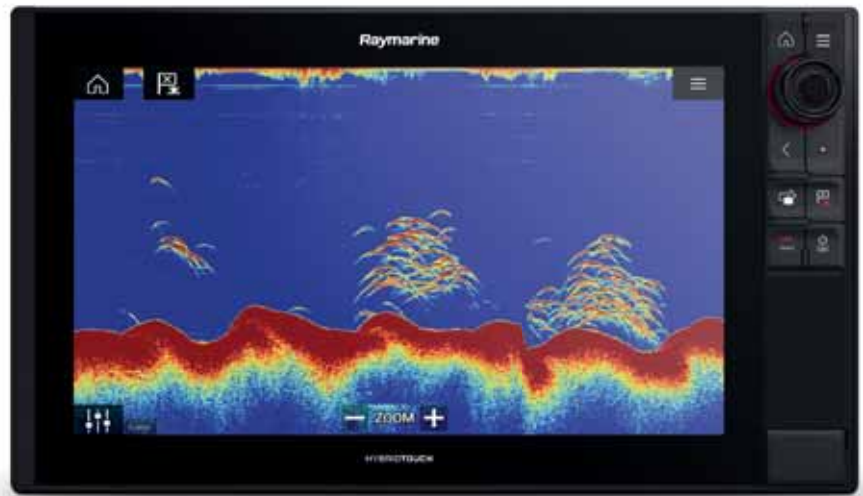
Fast, fluid and easy to learn. The Lighthouse 3 interface is uncluttered and easy to personalise for your style of boating.

BUILT-IN SONAR MODELS

Axiom Pro S models have a single high CHIRP sonar for reliable depth readings and occasional fishing. Axiom Pro RVX models feature a 1 kW 2 channel CHIRP sonar, RealVision 3D, DownVision and SideVision sonar.

LOW MEDIUM OR HIGH CHIRP

Axiom Pro 1kW sonar offers a wide spectrum of CHIRP sonar bands for deep, mid-range and shallow water fishing.

**REALVISION 3D**

Easily identify structure and locate fish with the life-like clarity of RealVision 3D sonar.

RADAR

Integrate seamlessly with Raymarine Quantum CHIRP or any other Raymarine radar system for all-weather, night-or-day navigation capability.





AXIOM AND AXIOM PRO CONNECTIVITY



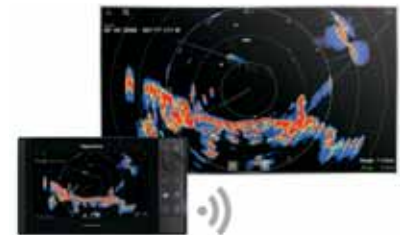
READY TO NETWORK

Connect Axiom, Axiom Pro and any LightHouse 3 display with easy-to-connect Raynet Ethernet networking. Create a network of multiple Axiom displays or expand with radar, FLIR thermal, IP cameras, sonar modules and more.



NMEA2000 AND SEATALK^{NG}

Integrate Axiom with instruments, electronic engine gauges and autopilots through NMEA2000 or SeaTalk^{ng} cabling.



WIRELESS DISPLAY STREAMING TO TVS AND MONITORS

Stream Axiom or Axiom Pro to compatible Wireless Display dongles (Miracast) and select Smart TVs.



MOBILE APPS

View and control your Axiom and Axiom Pro over Wi-Fi using Raymarine's RayRemote app for Smartphones and RayControl app for tablets. Axiom's built-in Wi-Fi lets you stream and control Axiom right from your smartphone or tablet. You can also sync waypoints, routes, and charts with Navionics mobile apps.



VIDEO MONITORING

Keep an eye on everything onboard from the helm. Axiom and Raymarine video over IP cameras. Axiom Pro also features an analogue camera input.



USB

For external drives, remote card readers and Smartphone charging.



gS SERIES

gS SERIES PREMIUM GLASS BRIDGE MULTIFUNCTION NAVIGATION DISPLAYS

Elegant, flexible and simple to use, gS Series multifunction displays will transform your helm station into a powerful glass bridge navigation system. A step above black-box systems, each gS Series display is a smart, self-contained multifunction navigation display. New for 2018, gS Series glass bridge displays are now upgradeable to the fast and intuitive LightHouse 3 operating system.

9"

12"

16"

19"





PHOTO: GRAND SOLEIL - FABIO TACCOLA



STAY INFORMED

Display the full suite of navigational information, graphics and data in stunning clarity. Network gS Series with NMEA 2000 engine instruments and access engine and fuel consumption data. For engines with J1939 interface protocols, the optional ECI-100 Universal Engine and Control Interface bridges engine data to the gS Series network.

A PERFECT FIT

The edge-to-edge glass appearance of gS Series allows the displays to be completely flush-mounted in the helm panel for an attractive and integrated navigation experience.

TOUCH OR REMOTE CONTROL

Enjoy fluid and effortless full touch-screen interaction with Raymarine's easy-to-use LightHouse II user interface or interact with any gS Series display from a single RMK-10 remote keypad.



EVOLUTION AUTOPILOTS

RADAR

COLLISION AVOIDANCE

THERMAL IMAGING

DIGITAL SWITCHING

VIDEO

ENGINE MONITORING



HD VIDEO INPUT AND OUTPUT

HDMI output enables connection to remote monitors or big screen TVs. Connect gS Series to your TV in the saloon and take control of the system with your tablet or smartphone via Raymarine mobile apps. HD-SDI video input on gS195.

**RMK-10 REMOTE**

The optional RMK-10 Remote keypad gives you full control of single or multiple displays from a remote location.





gS95: 9.0" / gS125: 12.1" / gS195: 19.0" / gS165: 15.4"

DISPLAYS

- Four display sizes 9.0", 12.1", 15.4" or 19"
- Ultra-bright sunlight-viewable LCD
- Optically bonded for sharp colour and contrast
- Low power consumption LED backlighting

CONNECTIVITY

- 2x composite analogue video input for thermal cameras and entertainment
- HDMI video output
- HD-SDI video input on gS195
- Each gS Series display is equipped with 3x RayNet POE Ethernet ports with integrated network switching for simple, reliable connectivity

- NMEA 2000 support using SeaTalk^{ng} cabling
- NMEA 0183 input and output
- Built in Wi-Fi for syncing with Raymarine mobile apps on smartphones or tablets
- Bluetooth connectivity to smartphones with remote audio controls
- External alarm connection



RADAR



FLIR THERMAL



VIDEO



AIS COLLISION AVOIDANCE



DIGITAL SWITCHING



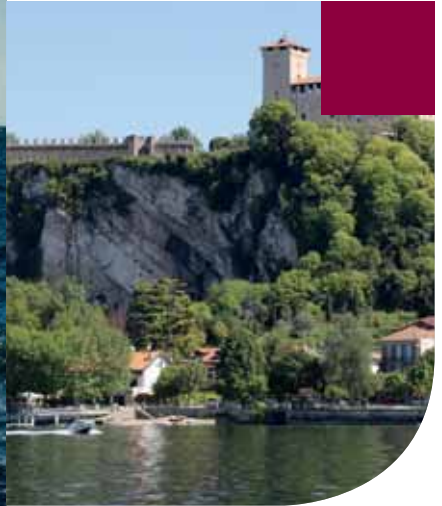
AUDIO



MARINE CHARTS AN UNPRECEDENTED CHOICE

Raymarine chartplotters and multifunction displays now have the option of three cartography choices in one MFD: Navionics cartography, C-MAP and Raymarine's ever-expanding range of LightHouse charts give you a powerful and flexible navigation experience. Transform the way you navigate with fully-featured vector charts, dynamic raster charts, plus 3D and satellite chart options.





RAYMARINE LIGHTHOUSE CHARTS

LightHouse digital charts are available in both vector and raster chart formats from leading nautical chart makers and hydrographic offices.

C-MAP

Worldwide digital cartography from C-MAP is accurate and easy to understand. C-MAP offers full featured vector charts, dynamic raster charts, C-MAP Easy Routing and high resolution bathy data on Raymarine Axiom MFDs.

NAVIONICS CHARTS

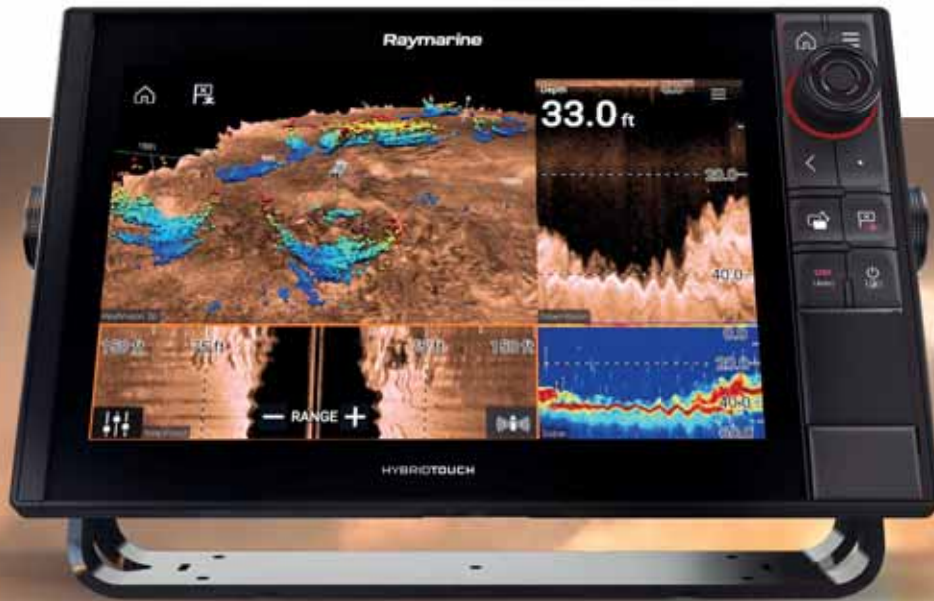
Navionics digital charts are world renowned for high quality and innovative features like SonarChart Live and Plotter Sync with Navionics's mobile apps. Raymarine Axiom MFDs are available bundled with Navionics charts and users can take advantage of Navionics' Freshest Data subscription to keep your charts up-to-date.

Images for illustrative purposes only. Product information and package contents subject to change without prior notice. Not all products support full functionalities or offer full chart selection.



SONAR

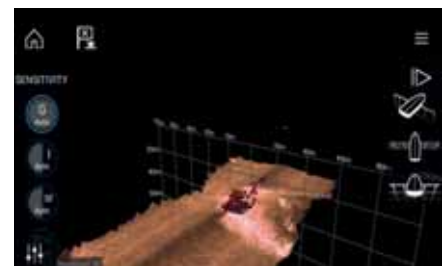
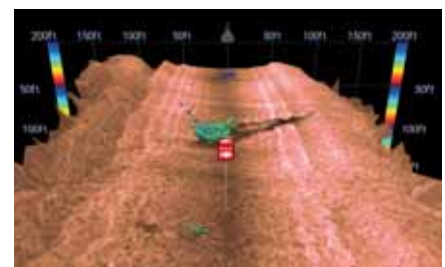
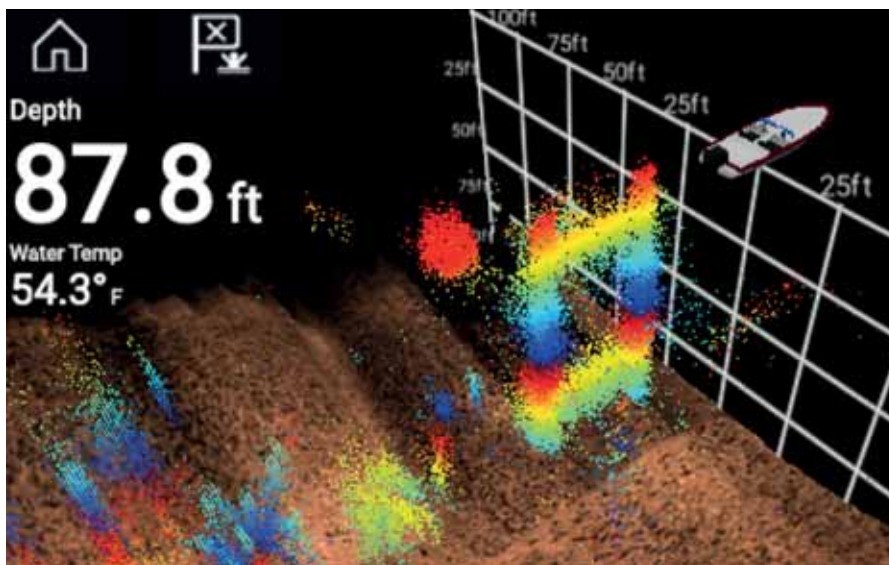
Raymarine offers a wide array of sonar technologies for all types of boating and fishing. Axiom and Axiom Pro are available with built-in RealVision 3D sonar that offers amazing performance and easy installation. Axiom, eS and gS-Series multifunction displays can also be expanded with add-on sonar modules to support deep water coastal and offshore fishing. No matter where you boat or fish, Raymarine's sonar lineup has you covered.





REALVISION 3D™

SUPERIOR SONAR



Available on Axiom and Axiom Pro, RealVision 3D give anglers the ability to see what's below, behind, and to the sides of the boat, all at once and in three-dimensions. With blazing quad-core processor and gyro stabilised transducer technology RealVision 3D displays the entire underwater world—including structure, cover, fish and forage—in stunning detail. Pan, tilt, and zoom the 3D image to examine from any angle.

You can even pause and rewind the sonar history to take a closer look or drop waypoint. Activate the GPS Trails feature and RealVision 3D uses GPS positing to construct the most accurate 3D model of the underwater world, in real-time.



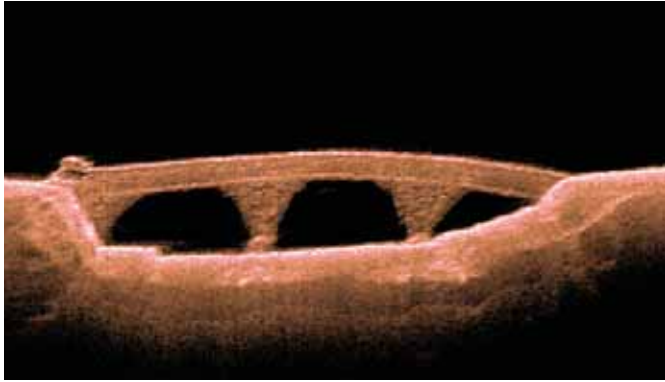
ALL-IN-ONE TRANSDUCERS

RealVision 3D Transducers combine CHIRP DownVision, CHIRP SideVision, High Frequency CHIRP, and RealVision 3D into a single transducer housing.



DOWNVISION SONAR

SUPERIOR SONAR



Available on CP100, Axiom, Axiom Pro and Dragonfly products, CHIRP DownVision delivers a photo-like view of the world beneath your boat, allowing you to image bottom structure with amazing detail and simultaneously target fish.

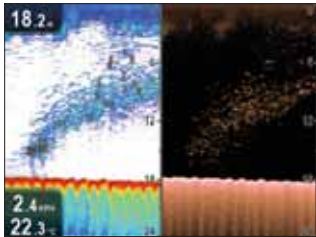
- Photo-like images of bottom structure with CHIRP DownVision
- Dual-channel; view high resolution CHIRP DownVision structure images and target fish with CHIRP sonar at the same time
- Perfectly matched dual-beam CHIRP transducers available in transom mount, plastic and bronze thru-hull configuration

FRESHWATER FISHING

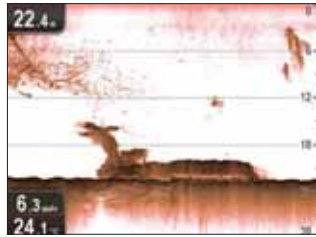
DownVision is ideal for freshwater anglers. CHIRP DownVision™ easily identifies the habitat of bass and other fresh water species.

COASTAL FISHING

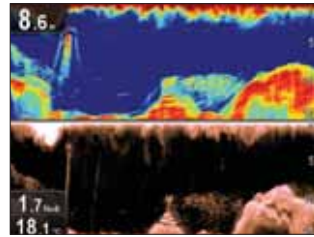
With depths down to 183m (600ft) for DownVision and 277m (900ft) conical, DownVision is perfect for coastal and bay fishing. View wrecks with unmatched clarity and use the second CHIRP channel to target bait and predators.



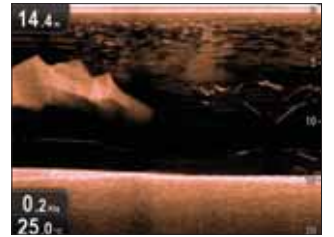
Shoal of fish



Submerged airliner



Submerged statue, fish and bottom structure



Massive ball of bait followed by Hairtail

SIDEVISION SONAR

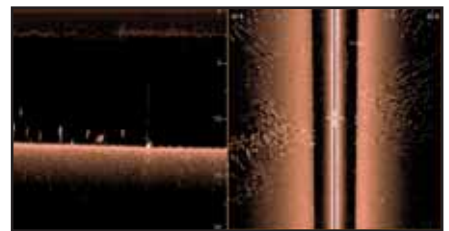
SUPERIOR SONAR



Underwater tree



Wreck



Fish

Available on the CP200, Axiom and Axiom Pro, SideVision™ Sonar expands your underwater horizon with crystal-clear, bank-to-bank displays of fish, bait and underwater structure. Engineered with the same CHIRP sonar technology as Raymarine's award winning DownVision, SideVision uses advanced CHIRP signal processing technology to let you see further, see more clearly, and detect more fish than traditional side scanning sonars.

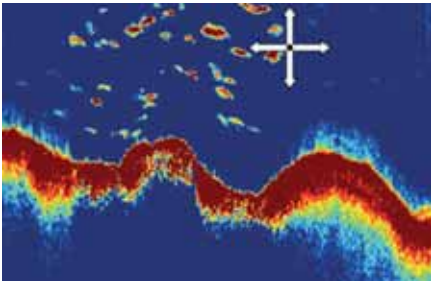
SUPERIOR RANGE PERFORMANCE

Raymarine CHIRP signal processing delivers high resolution and excellent long range performance. Identify objects and see fish even further, out to 183m (600 ft.) on each side.

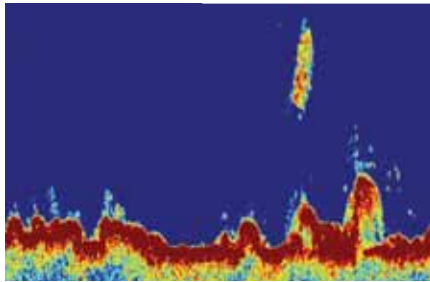
DIGITAL SONAR

FOR OFFSHORE AND COASTAL FISHING

Available on the CP370, Axiom and Axiom Pro, Digital Sonar delivers exceptional clarity, sharper fish targets, and automatic operation using Raymarine's next-generation ClearPulse™ digital sonar processing. Digital Sonar operates at 200kHz for inshore and 50kHz for offshore-fishing. ClearPulse™ signal processing intelligently manages the sonar parameters in all conditions so anglers can spend more time fishing and less time adjusting the sonar.



Enhanced Bottom Tracking



Better Noise Reduction



Enhanced Automatic Sensitivity Control

CHIRP SONAR

HIGH PERFORMANCE CHIRP FOR COASTAL AND OFFSHORE BLUE WATER FISHING

Available on Axiom Pro, CP470 and CP570

STUNNING DETAIL & CLARITY

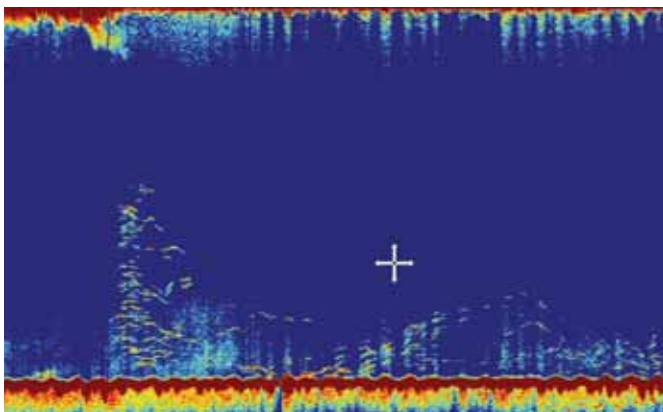
With 10 times the resolution of ordinary sonars the Raymarine wide spectrum CHIRP sonar delivers sharper, more defined fish targets and automatically filters out unwanted noise so you never miss the action below.

- TruZoom™ magnification mode reveals extra target detail without any loss of resolution.
- CP570's ultra-fast ping rate processing delivers accurate bottom tracking in extreme offshore conditions.

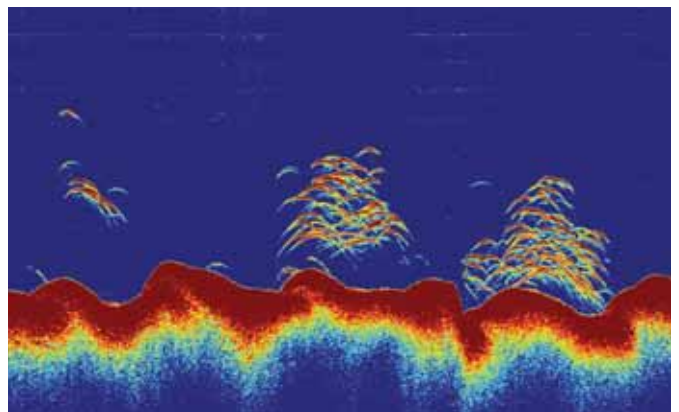
SERIOUS OFFSHORE SONAR

Superior target definition and enhanced sensitivity using Raymarine's exclusive wide spectrum CHIRP sonar technology.

- Target fish, identify bait, and track the sea floor down to 10,000ft. (3,000m) with two adjustable CHIRP sonar channels.
- Hunt for fish in different parts of the water column simultaneously with the CP570's two fully independent 2kW sonar channels.



Bait fish



Predator fish



DRAGONFLY

DRAGONFLY SONAR/GPS DISPLAYS

Welcome to Dragonfly®, superior fishing electronics made incredibly simple by Raymarine. With advanced technologies like wide-spectrum CHIRP DownVision™ and all-weather optically bonded displays, Dragonfly sonars let you spend more time catching fish and less time looking for them.





DRAGONFLY 4 PRO

- 4.3" Dual-Channel CHIRP DownVision™ Sonar with Chartplotter
- All-Weather Bonded Display
- 10Hz GPS
- Fish-Targeting Sonar
- CHIRP Technology
- DownVision™ Sonar
- Wi-Fish Mobile



DRAGONFLY 5 PRO

- 5" Dual-Channel CHIRP DownVision™ Sonar with Chartplotter
- All-Weather Bonded Display
- 10Hz GPS
- Fish-Targeting Sonar
- CHIRP Technology
- DownVision™ Sonar
- Wi-Fish Mobile



DRAGONFLY 7 PRO

- 7" Dual-Channel CHIRP DownVision™ Sonar with Chartplotter
- 7" Super-Bright LCD
- All-Weather Bonded Display
- 10Hz GPS
- Fish-Targeting Sonar
- CHIRP Technology
- DownVision™ Sonar
- Wi-Fish Mobile

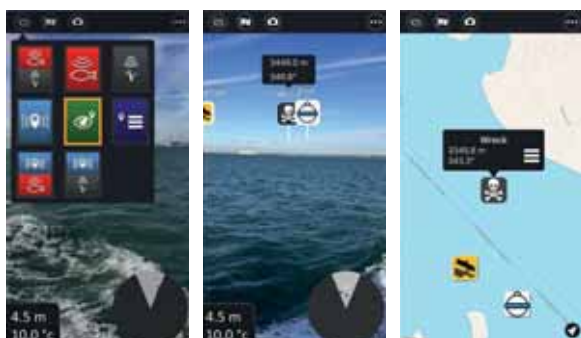


DRAGONFLY 5M

- 5" GPS/ Chartplotter
- All-Weather Bonded Display
- 10Hz GPS

WI-FISH SONAR: CHIRP DOWNVISION™ SONAR FOR SMARTPHONES AND TABLETS

- Transform your smartphone into a powerful CHIRP DownVision™ sonar with Wi-Fish™.
- Download the free Wi-Fish app and connect using standard Wi-Fi and you will be streaming real-time sonar direct to your phone or tablet.



WI-FISH MOBILE WITH AUGMENTED REALITY

- Uses the Wi-Fi access point in every Dragonfly-PRO and Wi-Fish
- See and control live sonar on your mobile device.
- Play, pause and rewind sonar.
- Take screen shots to share instantly on social media.
- Used with Dragonfly-PRO, the Wi-Fish app also offers Augmented Reality waypoint navigation and mobile-friendly mapping.
- Use your mobile device like a virtual periscope to see your waypoints and fishing spots overlaid on the real world around you.



CHIRP DOWNVISION & SIDEVISION SONAR MODULES

Whether your passion is freshwater, inshore or offshore coastal fishing, our DownVision™ and SideVision™ fishfinder sonar modules allow you to image structure and find fish simultaneously - all with exceptional clarity.

With fishfinders engineered for hobbyists and serious anglers alike, our range of sonar modules let you spend more time catching fish and less time looking for them.





CP100 CHIRP DOWNVISION SONAR MODULE

FRESHWATER FISHING

CP100 is ideal for freshwater anglers. Combined with Raymarine eSeries HybridTouch displays, the CP100 lets freshwater anglers create a multi-display network with HybridTouch control. Photo-realistic CHIRP DownVision™ easily identifies the habitat of bass and other fresh water species.

COASTAL FISHING

With depths down to 183m (600ft) for DownVision and 277m (900ft) conical, CP100 is perfect for coastal and bay fishing. View wrecks with unmatched clarity and use the second CHIRP channel to target bait and predators.

KEY FEATURES:

- Photo-like images of bottom structure with CHIRP DownVision
- Dual-channel; view high resolution CHIRP DownVision structure images and target fish with CHIRP sonar at the same time
- Network with Raymarine's latest multifunction displays. From the aSeries to the flagship –gS Series the CP100 brings underwater vision in resolutions up to 1280 x 800 pixels
- Perfectly matched dual-beam CHIRP transducers available in transom mount, plastic and bronze thru-hull configurations

CP200 CHIRP SIDEVISION

SUPERIOR RANGE PERFORMANCE

Raymarine CHIRP signal processing delivers high resolution and excellent long range performance. Identify objects and see fish even further, out to 183m (600 ft.) on each side.

CP200 KEY FEATURES

- Network compatible CHIRP SideVision™ sonar for aSeries, cSeries, eSeries, eS Series, and gS Series MFDs
- Multi-sonar compatible: view CHIRP SideVision™ alongside other sources, simultaneously
- Image fish, bait and bottom structure at distances up to 183m (600 feet) horizontally per side
- CHIRP signal processing delivers crystal-clear images with amazing detail
- Adjustable CPT-200 transducer optimises performance for shallow or deep water scanning

MFD COMPATIBILITY	
aSeries	cSeries
eSeries	eS Series
gS Series	



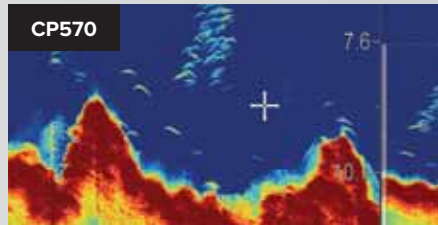
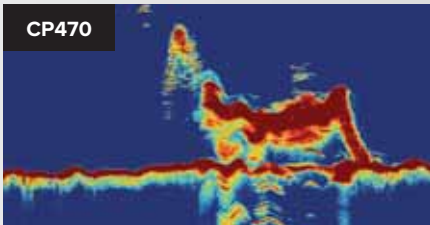
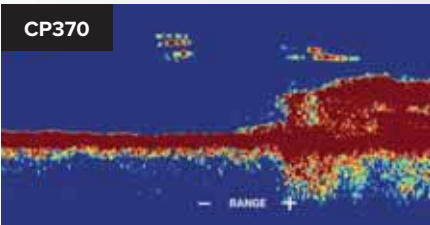
CPT-200: CHIRP SIDEVISION™ TRANSDUCER

Engineered for high performance CHIRP sonar, the CPT-200 transducer is perfectly matched to the CP200's CHIRP transceiver.

DIGITAL & CHIRP SONAR MODULES

Whether your passion is inshore or offshore coastal fishing, our fishfinder sonar modules allow you to image structure and find fish simultaneously – all with exceptional clarity.





CP370 DIGITAL (1KW)

DIGITAL SONAR MODULE FOR OFFSHORE & COASTAL FISHING

The CP370 delivers exceptional clarity, sharper fish targets, and automatic operation using Raymarine's next-generation ClearPulse™ digital sonar processing. The CP370 boasts up to 1,000 watts of power and operates at 200kHz for inshore and 50kHz for offshore fishing. ClearPulse™ signal processing intelligently manages the CP370 sonar parameters in all conditions so anglers can spend more time fishing and less time adjusting the sonar.

- Smarter target intensity controls reveal bait and game fish with exceptional clarity
- Enhanced digital filtering reveals fish targets through the entire water column
- Spend less time looking for fish and more time fishing. CP370 takes the guesswork out of interpreting the sonar display.
- Track the bottom in extreme conditions with ClearPulse™.
- New and improved bottom tracking algorithms deliver reliable performance in challenging conditions like running at high speeds and transitioning across canyons.

CP470 CHIRP (2KW)

HIGH PERFORMANCE CHIRP FOR COASTAL AND OFFSHORE BLUE WATER FISHING

Engineered for serious anglers, the CP470 sonars bring best-in-class target separation and high-resolution CHIRP sonar imagery to Raymarine multifunction displays. Using a wide spectrum of frequencies and greater sensitivity, the CP470's advanced CHIRP transceiver can see through dense schools of baitfish, identify thermoclines, and simultaneously target desired game fish.

- Rated for offshore use and rough conditions.
- CP470 intelligently filter out unwanted noise while producing high resolution fish targets and reliable bottom tracking.
- Target fish, identify bait, and track the sea floor down to 10,000ft. (3,000m) with two adjustable CHIRP sonar channels.

CP570 CHIRP (4KW)

PROFESSIONAL CHIRP SONAR MODULE FOR TOURNAMENT AND OFFSHORE BLUE WATER FISHING

For the professional angler the CP570's two fully independent sonar channels deliver faster target identification and up to 4kW of combined output power.

Superior target definition and enhanced sensitivity using Raymarine's exclusive wide spectrum CHIRP sonar technology.

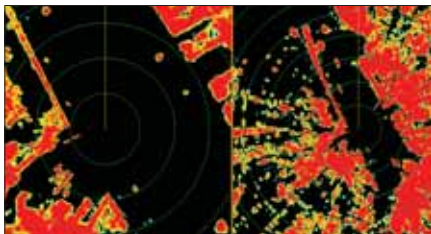
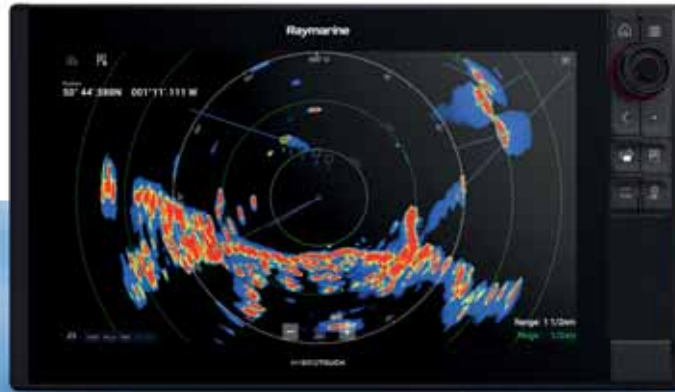
- Target fish, identify bait, and track the sea floor down to 10,000ft. (3,000m) with two adjustable CHIRP sonar channels.
- Hunt for fish in different parts of the water column simultaneously with the CP570's two fully independent 2kW sonar channels.
- With 10 times the resolution of ordinary sonars the CP570 delivers sharper, more defined fish targets.
- Automatically filter out unwanted noise so you never miss the action below.
- TruZoom™ mode reveals extra target detail without loss of resolution.
- Ultra-fast ping rate processing delivers accurate bottom tracking in extreme offshore conditions.



MFD COMPATIBILITY		
Axiom	Axiom Pro	gS Series
eS Series	aSeries	

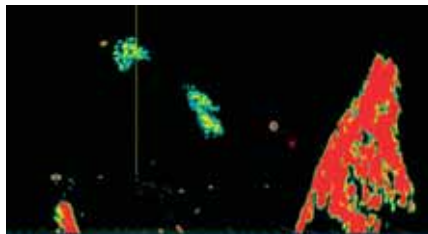
RADAR

Day and night, radar systems from Raymarine keep you aware of surrounding traffic, hazards, rain, sea birds and much more. From Quantum™ CHIRP radar, to ultra-high performance open arrays, Raymarine has the perfect radar solution for every boat.



DUAL RANGE SCANNING

Simultaneously monitor near and far targets from a single radar antenna with dual-range scanning, found on the HD Color and Super HD Color radar systems.



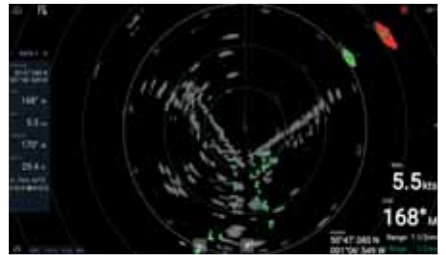
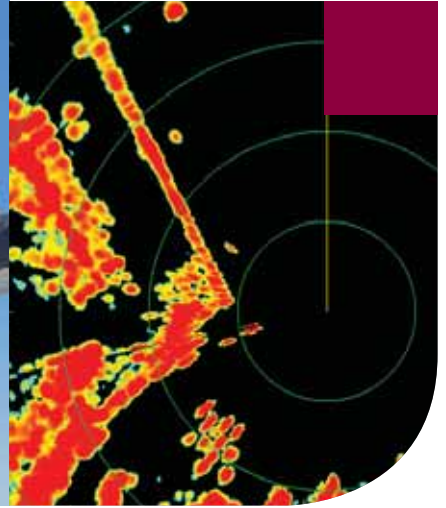
BIRD MODE

Bird Mode automatically optimises the radar to target seabirds, giving fishermen the heads up on where the fish are. Available on HD Color Domes and Super HD Color Arrays.



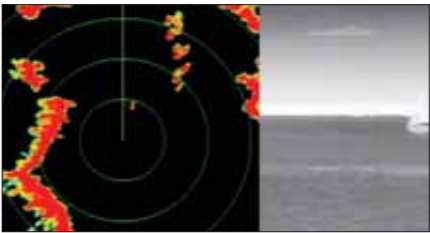
TRACK TARGETS

Not everything transmits AIS. Using MARPA (mini-automatic radar plotting aid) allows you to identify vessel, speed, bearing, closest point of approach (CPA) and time to closest point of approach (TCPA), set dangerous/proximity alarms, and overlay AIS info for further target clarification.



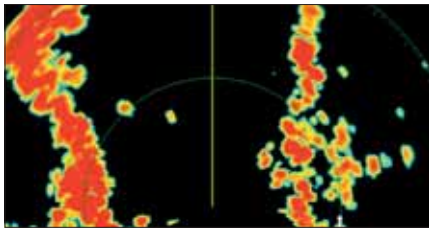
NEW QUANTUM 2 DOPPLER RADAR

Raymarine Doppler radar technology makes it easy to discern potentially dangerous targets when navigating in high-traffic areas. Available on the new Quantum 2 solid state CHIRP radar, Doppler mode instantly highlights moving radar contacts and colour codes them to indicate whether they are inbound or outbound.



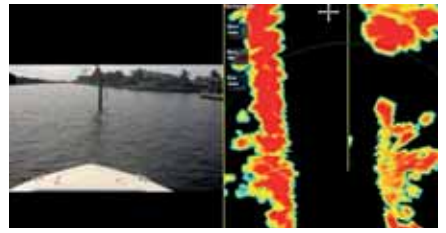
RADAR & THERMAL IMAGING

Every Raymarine radar integrates with FLIR thermal night vision camera systems. Instantly identify radar contacts day or night. Slew-to-cue target tracking with FLIR pan and tilt thermal night vision camera systems.



DETAIL AND CLARITY

Raymarine's radar systems produce sharp, crisp targets and automatic sea clutter rejection produce radar images with stunning, life-like clarity.



SHORT-RANGE DETECTION

Quantum's CHIRP Pulse Compression technology lets you detect targets as near as 18ft, giving you extra confidence in dense fog and low visibility.



RADAR ANTENNAS

Raymarine offers a wide range of radar antennas with options to fit every vessel. Quantum radomes offer superior short-range performance and the option of convenient wireless connectivity. HD Color radomes and open arrays come packed with powerful transmitters and advanced features like bird mode, dual range scanning and high speed 48RPM mode.





QUANTUM AND QUANTUM 2 DOPPLER RADAR

Setting a new standard for compact solid-state radar, Quantum and Quantum 2 deliver superior radar imaging on both long and extremely short ranges using CHIRP Pulse Compression technology. Thin cables and optional Wi-Fi connectivity simplifies installation plus Quantum's energy efficient and lightweight design provides safe radiated emissions and substantially reduced power consumption.

SUPERIOR PERFORMANCE

- Quantum's CHIRP Pulse Compression technology uses multiple compressed radar pulses with FLIR's exclusive ATX™ advanced target separation technology
- Quantum with ATX™ displays targets like boats, landmarks, buoys, and weather cells with unsurpassed resolution and separation quality versus traditional magnetron radars
- Excellent short-range detection and enhanced target detail with 18' (6m) minimum range
- Immediate awareness – Quantum starts up and is ready to go in seconds
- Superior interference rejection eliminates noise from other radars

ENERGY EFFICIENT AND LIGHTWEIGHT

- Weighs 50% less than traditional magnetron radars
- Safe Emissions thanks to Quantum's low power solid state transmitter
- Very low power consumption (17 Watts transmit and 7 Watts standby)
- Extended vessel battery life when under sail

SIMPLIFIED INSTALLATION

- Simple Wi-Fi connection between Quantum and Raymarine LightHouse powered MFDs
- Quantum's small diameter power cable is easy to route through tight spaces
- Easy to upgrade – Quantum uses the same bolt pattern as previous generation radars.
- Optional Quantum adapter cable eliminates the need to run new radar cables

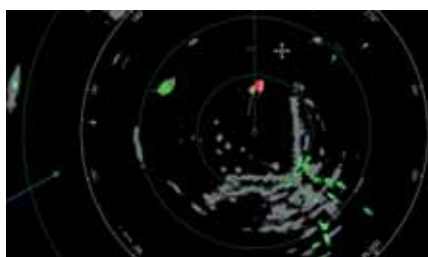
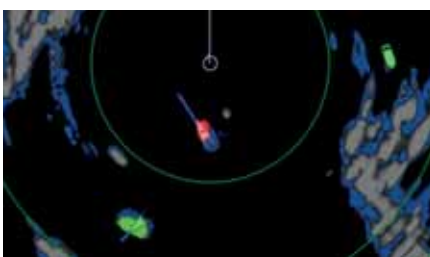
DOPPLER COLLISION AVOIDANCE TECHNOLOGY

Quantum 2 instantly highlights moving radar contacts and colour codes targets to indicate whether they are inbound or outbound. Quantum 2 with Doppler makes it easy to discern potentially dangerous targets when navigating in high-traffic areas. Quantum 2 delivers superior situational awareness with fully automatic MARPA target tracking. Developed for law enforcement and search and rescue craft, Quantum 2's target tracking algorithms produce fast, accurate, and stable solutions to keep you apprised of the surrounding traffic.

QUANTUM 2 KEY FEATURES

All the features and performance of Quantum radar plus:

- Doppler moving target display allows for superior situational awareness at-a-glance
- Fully automatic MARPA target tracking eliminates the need to manually select targets of interest and keeps your eyes on the water.
- True Trails target history shows the motion history of moving contacts





HD AND SUPER HD COLOR OPEN ARRAY SCANNERS

The choice of mid to large-sized powerboats and large sailing vessels, open array radar scanners deliver higher sensitivity, better target detection and improved target separation. Open array systems are available with 4kW or 12kW transmitters for exceptional performance at all ranges.

SUPER HD DIGITAL COLOR RADAR

- 48 and 72 inch open array options
- Choice of 4kW or 12kW power output
- Greater dynamic range than conventional radar
- Acquires and processes vast amounts of echo information normally lost by conventional analogue radar
- Intelligently isolates and identifies true radar targets and simultaneously eliminates unwanted clutter
- Extra-narrow beam width pinpoints targets with stunning clarity and gives dramatically clearer radar displays
- Bird mode can mark fishing targets up to 10nm away



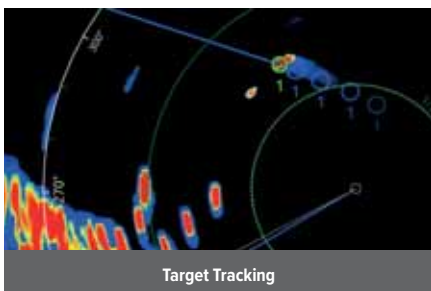


HD COLOR RADOME SCANNERS

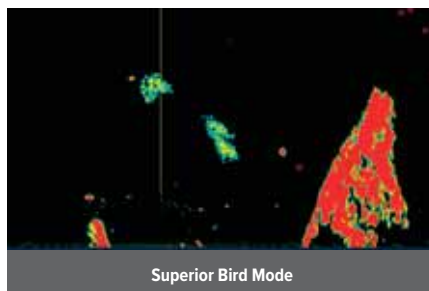
Radome antennas are the perfect blend of compact size, light weight and high performance. Choose a radome antenna when space is at a premium or restricted by rigging. Radome scanners also consume less power than open array scanners which is essential for long-distance cruising sailboats.

HD DIGITAL COLOR RADAR

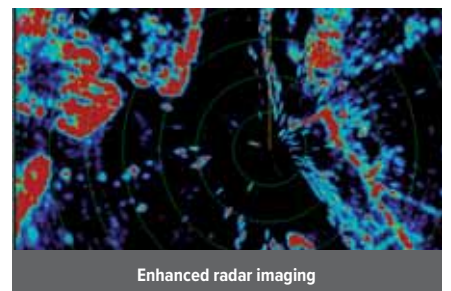
- 18 and 24 inch 4kW radomes
- Superior target detection and interpretation
- Identify target types, detect weak and distant contacts automatically, and virtually eliminate clutter and noise
- Adaptive transmitter and receiver automatically adjusts to changing environmental and sea conditions
- Dramatically clearer radar images
- Dual-range, bird mode and 48 RPM high-speed mode.



Target Tracking



Superior Bird Mode



Enhanced radar imaging



RACE, CRUISE, OR FISH EVOLUTION WILL TAKE COMMAND

Evolution Technology: The culmination of Raymarine autopilot expertise, FLIR Systems' R&D, and advanced aerospace guidance technology, Evolution Ai™ control algorithms deliver a new level of accurate autopilot control.





PHOTO: © BENETAU / GUIDO CANTINI



AEROSPACE TECHNOLOGY

9-axis precision monitoring of pitch, roll, yaw and heading.

FUEL EFFICIENT

Evolution autopilots steer so accurately they can save fuel and get you to your destination faster.

EASY TO INSTALL

- Freedom from restrictions of conventional heading sensors
- EV sensor core can be installed above or below deck, upside-down or off the vessel's centre line
- No lengthy calibration procedures to perform
- Automatic compass calibration
- Plug and play connections

EVOLUTION AUTOPILOT PERFECTION

Evolution's 9-axis EV sensor core now uses patented algorithms for improving the accuracy of measured wind conditions. Enhanced awareness of wind angle and wind speed allows Evolution to deliver crisp and responsive steer-to-wind control, giving both cruising and racing skippers the confidence to let Evolution take command in the most challenging conditions.

EVOLUTION TRACK IQ™

Exclusive Evolution TrackIQ™ technology delivers best-in-class steer to GPS waypoint tracking. Patented Evolution algorithms and 9-axis gyro stabilization compensates for the effects of sea conditions and vessel motion, enabling Evolution to make smoother steering commands and keep the vessel on a plotted GPS course with incredible accuracy regardless of boat size.



PHOTO: AFP

RACE PERFORMANCE

When only the best will do. Razor-sharp course keeping. Fine-tuned for racers!



CRUISING PERFORMANCE

Superb course keeping and crisp turns in all conditions – the Raymarine skippers choice



LEISURE PERFORMANCE

For relaxed boating, when soaking up the sun is more attractive than precise course keeping

AUTOPILOT CONTROL

Complete your Evolution autopilot system with a p70s or p70Rs autopilot control head. The p70s and p70Rs feature vibrant colour displays and are powered by Raymarine's intuitive LightHouse user interface. LightHouse organises all options into simple menu structures, so with Evolution's Automagic 3-step setup process you will be up and running in minutes.



p70s CONTROL HEAD

Designed for sailing yachts, the p70s offers simple 1 and 10 degree direct course changes at the touch of a button.



p70Rs CONTROL HEAD

Features a rotary dial control for power boaters. Use the rotary dial for menu and course changes or activate power steer mode and steer manually right from the p70Rs.

EV-1 COCKPIT AND INBOARD AUTOPILOTS

EV-1 autopilots consist of a Control Head, EV-1 Sensor, Autopilot Control Unit (ACU) and drive unit. The drive unit (inboard mechanical/hydraulic or cockpit mounted), and correct ACU for your vessel is dependent on the steering system and displacement of the vessel itself.

p70s	EV-1	Actuator Control Unit	Drive Unit (type dependent on vessel steering system)
			



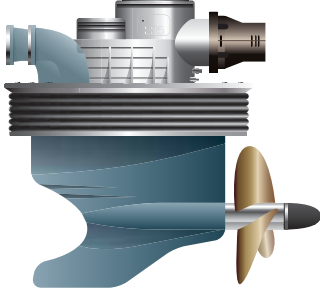



EV-2 FOR DRIVE-BY-WIRE PROPULSION

EV-2 has been designed for the latest drive-by-wire steering systems and connects directly to Raymarine's SeaTalk^{ng} bus. EV-2 also has a dedicated CAN Bus port for direct connection to steer-by-wire steering systems such as ZF Pod Drives, Yamaha Helm Master, Volvo IPS* and SeaStar Solutions Optimus systems.

A single CAN Bus connection to the EV-2 eliminates the need for an Autopilot Control Unit (ACU), further simplifying installation.

* Use a Raymarine ECI-100 Universal Control and Engine Interface for a quick and easy install.

p70s	EV-2	Inboard Engine	Outboard Engine
			

ECI-100 UNIVERSAL ENGINE AND CONTROL INTERFACE



The ECI-100 Universal Engine and Control Interface is an innovative and affordable solution for bridging engine instrumentation and drive-by-wire steering with Raymarine autopilot and navigation systems.

A simple isolated CAN Bus solution, the ECI-100 offers reliable integration with Raymarine's latest generation of multifunction displays and delivers a seamless autopilot steering interface to Raymarine's Evolution EV-2 Drive-By-Wire autopilot system.

Note: See our website for a list of compatible engines.

AUTOPILOT SYSTEM PACKS

COCKPIT AUTOPILOTS

EV-100 autopilots are installed in the cockpit of tiller and wheel steered yachts and smaller power boats. An EV-100 system consists of an EV-1 Sensor, ACU-100 Autopilot Control unit, drive unit and control head.

EV-100 WHEEL

Wheel-steered sail up to 16,000 lbs / 7,500 kg



EV-100 HYDRAULIC POWER

Hydraulic-steering 3.1in³ - 6.7in³ / 50-110cc, 12V



EV-100 TILLER

Tiller-steered sail up to 13,200 lbs / 6,000 kg



EV-150 HYDRAULIC POWER

Hydraulically-steered power 4.9in³ - 14.0in³ / 80-230cc, 12V



AUTOPILOT SYSTEM PACKS

INBOARD AUTOPILOTS

The Evolution inboard range consists of autopilot packs designed to suit specific vessel types, steering systems and vessel displacements. Autopilot pack selection is, therefore, determined by:

1. The type of steering system installed on your vessel
2. Hydraulic steering systems; the pump has to be matched to volume of hydraulic steering ram (in cc)
3. The size and displacement of your vessel – always take the fully laden displacement of your vessel into account (often 20% above the designed displacement)

EV200/EV400 POWER BOAT SYSTEMS

EV-200: Hydraulically-steered power 4.9in³ - 14.0in³ / 80-230cc
 EV-400: Hydraulically-steered power 14.0in³ - 30.5in³ / 230-500cc

EV-300 SOLENOID

Vessels with solenoid controller systems



EV200/EV400 SAIL SYSTEM

EV200: Mid-size sail up to 24,000 lbs / 11,000 kg
 EV400: Large sail up to 77,000 lbs / 35,000 kg

EV DRIVE-BY-WIRE

Drive-by-wire steering systems





MFD PILOT CONTROL

Evolution pilots can also be controlled from aSeries, cSeries, eSeries, eS Series, Axiom, Axiom Pro and gS Series Raymarine multifunctional displays (MFD).



FISHING PATTERNS

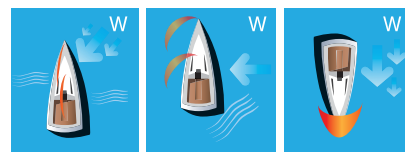
Fishing patterns are available when the p70s and p70Rs control heads are used with Evolution.



HYDROBALANCE

Hydro-Balance™ Technology delivers superior autopilot performance on boats with hydraulic steering, and particularly on boats with rudder reference-less steering and outboard motors.

Patented Hydro-Balance technology automatically compensates for trapped air, hose expansion and torque steer. Hydro-Balance is available as part of the free Evolution R4 software update



EVOLUTION PERFECT ON

ALL POINTS OF SAIL

- Upwind in short chop
- Downwind with kite up
- Broad reach with quartering sea



FOLLOW ON TILLER

The Follow-On Tiller autopilot controller brings fully functional power steering to remote and secondary control stations anywhere onboard. With a single button press, the tiller activates Evolution's Power Steer mode, enabling you to send precise steering angle commands to the rudder, up to 35°. Install the Follow-On Tiller at bridge wing stations, aft docking stations, or even into the arms of pilothouse helm chairs. The intuitive design lets you make precise steering adjustments with a simple turn of the lever or dial.

- Designed for surface mount installation into any flat, rigid surface.
- Fully waterproof for above decks mounting.
- Up to four Follow-On Tillers can be installed onboard the vessel enabling control from multiple locations.
- Installation is simple thanks to standard SeaTalk^{ng} CAN bus connectivity.
- The Follow-On Tiller controller is designed for use on Raymarine Evolution Autopilot Systems installed on powerboats only.



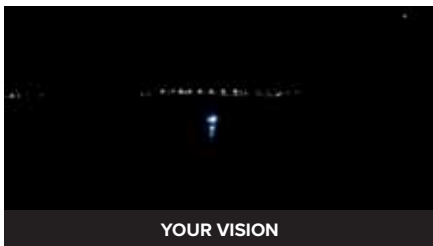
FLIR THERMAL VISION

FLIR thermal night vision cameras turn night into day, keeping you safe and secure on the water, and letting you boat with confidence. Raymarine systems and FLIR thermal cameras integrate seamlessly and offer exclusive situational awareness technologies like ClearCruise™ thermal analytics, for easier recognition of other vessels and navigation hazards.



When connected to a FLIR M132 or M232, exclusive FLIR ClearCruise™ thermal video analytics technology enables Axiom to actively monitor the thermal scene and provide alerts when any non-water objects enter the camera's field of view.

SEE THE HEAT



Your Vision: Emergency lights on a police boat mask its navigation lights making it hard to determine its aspect at night.



FLIR Vision: Thermal imaging is immune to visible light and glare. Not only can we clearly see the police boat, we can also see the buoy and jetty astern of it.

Thermal imaging works night and day, in total darkness or bright sunlight, through smoke, dust, and even light fog to keep your passengers and crew safe from hazards and threats.



SEE AT NIGHT



Your Vision: Floating debris is almost impossible to spot at night, especially with bright urban back lighting.



FLIR Vision: Thermal imaging easily detects the floating box, as well as the bridge span ahead. The thermal camera is completely immune to the effects of bright city lights and glare.



In addition to the power of thermal vision, some FLIR maritime cameras feature video analytics technology for recognising and automatically tracking objects in the cameras field of view.

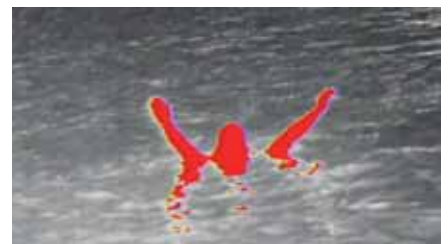
BOAT SAFER AND AVOID DANGER



Day or night FLIR thermal imaging detects obstacles like jetties, rocks, navigation aids and more. Charged by daylight these objects continue to emit infrared heat all night long.



Thermal imaging instantly detects kayaks, paddleboards, and personal watercraft. The kayaker's own body heat makes him a bright target for FLIR thermal imaging.



Thermal imaging is the fastest way to detect a person in the water. FLIR's InstAlert™ colour palette can even highlight the hottest target in a scene in red, making detection faster and easier.

ENHANCED SITUATIONAL AWARENESS



FLIR thermal cameras make it easy to confirm the positions of navigation aids and landmarks. Cameras with pan, tilt and zoom gimbals can even integrate with Axiom and Raymarine radar, making target identification easier.

THERMAL NIGHT VISION CAMERAS

Thermal night vision cameras from Raymarine give captains the confidence to navigate safely in total darkness. Engineered with genuine FLIR thermal imaging technology, Raymarine's thermal night vision cameras are designed for simple, seamless operation with Raymarine multifunction displays.



OCEAN SCOUT



OCEAN SCOUT TK



OCEAN SCOUT HANDHELD

Ocean Scout is a rugged, compact thermal night vision camera that lets you see other vessels, landmarks, buoys, and floating debris in total darkness.

Now with a high resolution LCD display and FLIR's industry-leading thermal sensor technology, Ocean Scout makes your time on the water safer and more relaxing.

OCEAN SCOUT TK HANDHELD

The FLIR Ocean Scout TK is a marine thermal camera that extends your vision on the water, day or night, for greater awareness and safety. As a thermal imager, the Ocean Scout TK creates images based on heat, not visible light. Vessels, watercraft, buoys, and other obstacles give off heat and appear clearly in all lighting conditions – from pitch darkness to blinding sun glare.



M132 AND M232 SERIES

The M132 and M232 marine thermal night vision cameras from FLIR take affordability and easy integration to a whole new level. Packing 320x240 thermal resolution, video over IP, and digital zoom into the smallest, lightest pan/tilt housing on the market, the M132 and M232 are the perfect additions to any vessel.

Combine Axiom or Axiom Pro with the FLIR M132 or M232 thermal camera and enjoy ClearCruise™ IR Analytics. Axiom will automatically alert you to obstacles in your path.

AX8 THERMAL MONITORING

Gain an entirely new view of your vessel's mechanical system with the new AX8 thermal monitoring camera. Combining thermal and visible cameras in a small, affordable package, the AX8 integrates with Raymarine multifunction displays (MFDs) and sends audible and visual alerts when the temperature of machine parts rise above preset thresholds. Keep a watchful eye on such critical

equipment as engines, exhaust manifolds, and shaft bearings and spot problems before they leave you stranded on the water. Exclusive MSX® imaging blends visible and thermal images for more detailed imagery that is easier to understand.



	MOB	Small Vessel
Ocean Scout TK	100m (390ft)	
Ocean Scout 240	350m (1,150ft)	0.9 km (0.48nm)
Ocean Scout 320	550m (1,800ft)	1.5km (0.84nm)
Ocean Scout 640	1,140m (3,705ft)	3.2km (1,73nm)
M132/M232	457m (1,500ft)	1.3km (0.67nm)



MARINE VIDEO CAMERAS

Raymarine video cameras transform your Raymarine multifunction display into a powerful video observation system. Connect multiple IP based cameras to your Raymarine LightHouse powered MFD and keep an eye on all the action. Switch from camera-to-camera with a simple swipe of the MFD's touchscreen. LightHouse supports video viewing, recording, playback, and snapshot.





CAM220IP

Ruggedised, High Definition, Day and Night network eyeball video camera suitable for above or below deck applications. Eyeball design provides all round selected viability whilst the small frame size allows for rapid installation. Stylised to blend in with your boat's aesthetic design.

- Plug and play integration with Raymarine MFDs running Lighthouse
- Power over Ethernet (PoE) or direct 12v DC power supply
- Simple mechanical frame allows the camera to be locked, rock steady, into position
- High bright IR LEDs for operation in total darkness



CAM210IP

Ruggedised, High Definition, Day and Night network bullet video camera suitable for all above deck applications. Integrated sun-cover for maximum visibility and small frame size for easy installation anywhere on the boat.

- Plug and play integration with Raymarine MFDs running Lighthouse
- Power over Ethernet (PoE) or direct 12v DC power supply
- High bright IR LEDs for operation in total darkness
- Digital Defog processing improves the captured image in poor weather conditions (such as smog, fog or smoke)
- Intelligent IR technology for clear video images at night in all conditions



CAM50

- Analogue video camera with composite video output
- Ideal for mounting in the saloon, wheel house or engine room
- Plug-and-play with Raymarine MFDs
- Ceiling or wall mount
- Manually adjustable pan and tilt



AIS RECEIVERS & TRANSCEIVERS

AIS (Automatic Identification System) systems enable the wireless exchange of navigation status between vessels and shore-side traffic monitoring centres. Commercial ships, ocean-going vessels and recreational boats equipped with AIS transceivers broadcast AIS messages that include the vessel's name, course, speed and current navigation status.



SEE AND BE SEEN

Operating in the VHF maritime band, the AIS (Automatic Identification System) system enables the wireless exchange of navigation status between vessels and shore-side traffic monitoring centers. Commercial ships, ocean-going vessels and recreational boats equipped with AIS transceivers broadcast AIS messages that include the vessel's name, course, speed and current navigation status.



TRANSMIT YOUR POSITION

Fitting a Class A or Class B AIS transceiver ensures that you are seen by other AIS equipped vessels.

VESSEL PROTECTION

As part of a suitably configured network, AIS enables owners to be alerted to unauthorised vessel movements.

PORT MANAGEMENT

AIS can be used as a highly effective port management tool allowing easy identification, control and direction of vessels.

COASTAL SURVEILLANCE

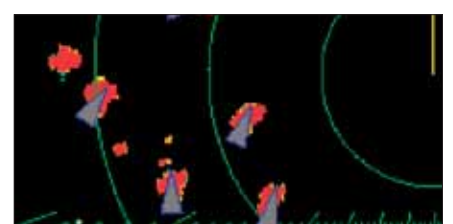
AIS and radar can be used to create effective and efficient coastal tracking, surveillance and safety systems.



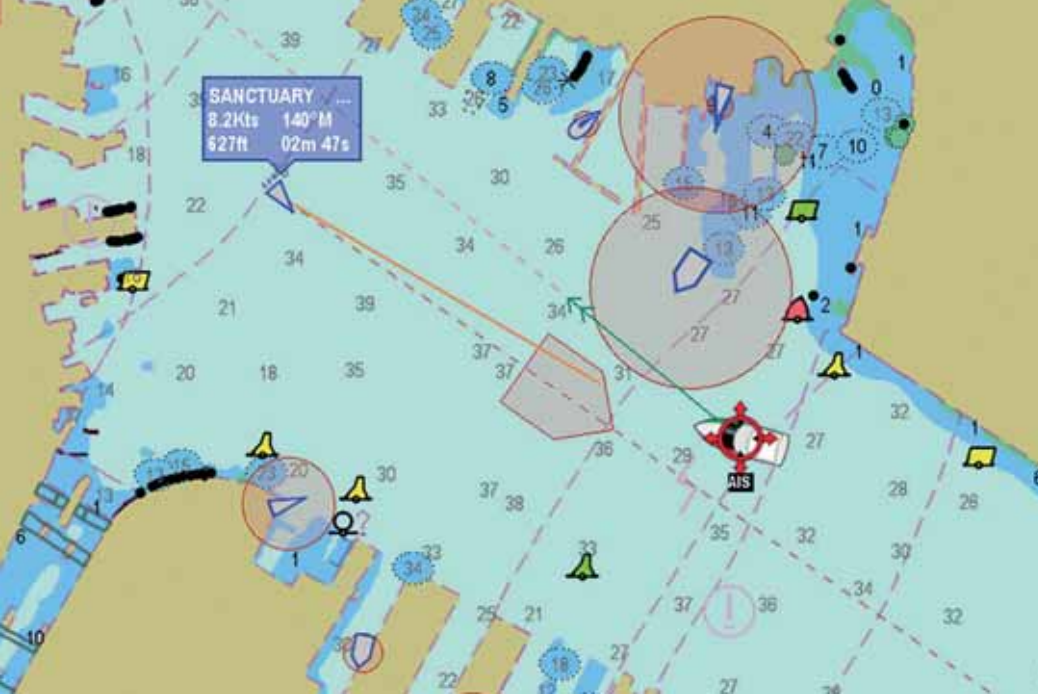
LightHouse II AIS Target Intercept graphic overlays



AIS Targets overlaid on chart



LightHouse II AIS Targets overlaid on radar screen



RECEIVE-ONLY AIS

- Inexpensive and low-powered
- Receive and see other vessels Class A and Class B data on Raymarine MFD radar and/or chartplotter

CLASS A AIS

- Required for IMO/SOLAS commercial vessels
- Class A transmits and receives the full set of AIS information

CLASS B AIS

- For small commercial vessels and pleasure vessels that do not need to comply with IMO/SOLAS regulations
- Transmits shortened/simplified AIS information at a slightly less frequent rate than Class A
- Less AIS functionality than Class A
- Uses lower transmission power



AIS950 TRANSCEIVER (CLASS A)

- Combined receiver and transmitter
- Approved for deep sea and inland waterway standards (royalty costs apply)
- Fully compliant Class A AIS product
- Advanced radio communications technology
- Intuitive user interface for easy access to all information
- Large, high visibility mono LCD



AIS650 TRANSCEIVER (CLASS B)

- Transmit your boat's data to AIS equipped vessels
- Receive and see data on Raymarine MFD radar and/or chartplotter screens
- Engineered for high performance and seamless integration with Raymarine navigation systems



AIS350 RECEIVER ONLY

- Dual-channel receive-only
- For small vessels wanting increased situational awareness, but without the need to transmit
- Low cost alternative brings AIS safety advantages to a wider range of vessels



NEW AIS700 TRANSCEIVER WITH VHF SPLITTER

The AIS700 is a Class B Automatic Identification System (AIS) transceiver designed for use with Raymarine multifunction navigation display systems. A Class B AIS transceiver, the AIS700 receives broadcasts from other vessels and transmits your vessel's AIS information to other boaters, providing enhanced situational awareness and safety.

- Latest SO-TDMA networking for longer range and faster performance
- Built-in antenna splitter simplifies installation with existing VHF radio antenna
- NMEA2000/SeaTalk^{ng}, NMEA0183, PC and SeaTalk^{ng} Compatible
- Software or hardware switchable Silent Mode for enhanced security when needed



INSTRUMENTS: ANALOGUE & DIGITAL

Raymarine has the instrument displays for you whatever your boating requirements - from the compact but powerful Raymarine i40 instrument displays series to the high-end, large screen Raymarine i70s instrument displays.





I70S: MAXIMUM VISIBILITY & MAXIMUM VERSATILITY

The i70s multifunction gives you the flexibility to display instrument and navigation data that is most important to you. Equipped with a bold and bright 4.1" display the i70s is easy to customise with digital, analogue and graphical displays of depth, speed, wind and more. Add the i70s to your existing Raymarine instrument system or create a network of i70s displays and sensors, the choice is yours.



KEY FEATURES

- 4.1" super bright oversized LCD for maximum visibility
- All weather optically bonded display technology delivers brighter colours, sharper contrast, and a wide viewing angle
- New glass bridge industrial design compliments Raymarine eS and gS Series multifunction displays
- Simple user interface with sculpted rubber keypad for precise operation in all conditions
- Customisable data displays of depth, speed, wind and more
- SeaTalk^{ng} networking for seamless connectivity to Raymarine systems and NMEA2000* networks
- NMEA2000 data connectivity* for engine, environment, fuel and navigation
- Combine the i70s with the ITC-5 instrument transducer convertor and connect to analogue depth, speed, and wind sensors
- Supplied with both black (eS/Axiom Series style) and gunmetal (e Series/a Series style) bezels and protective suncover.

*NMEA2000 certification pending. A DeviceNet to SeaTalk^{ng} adaptor is required for connecting the i70s to NMEA2000 backbone.



i50 & i60 ANALOGUE & DIGITAL INSTRUMENTS

The i50 and i60 instruments are designed to complement Raymarine's latest generation multifunction displays. These stylish, dedicated-function instruments are the perfect solution for smaller power boats, yachts, and RIBs. The i50 range consists of 3 digital displays: speed and depth displays with extra-large digits and a multi-line tridata unit. Designed primarily for the sailboater, i60 covers wind and close hauled wind options in analogue and digital formats.

Excellent viewing angles for both day and night conditions, and simple push-button controls make i50 and i60 instruments extremely easy to see and use. They are also simple to install thanks to the front-mount design.



i50 Speed



i50 Depth



i50 Tridata





i60 CH Wind



i60 Wind

GENERAL FEATURES

- i60: Large analogue dials
- i50: Large numerals and digits
- SeaTalk and SeaTalk^{rig} interfaces
- NMEA 2000 support
- Built-in transducer interface
- 110mm x 115mm footprint
- Low power consumption
- Multiple data source support eliminates potential data conflicts
- Front-mounted design for simple installation

i40 COMPACT SPEED, DEPTH, WIND & BIDATA INSTRUMENTS

Big displays for smaller powerboats, yachts and RIBs, these compact yet powerful SeaTalk instruments offer full integration with Raymarine autopilots and navigation equipment and can be surface or trunion-mounted. Easy-to-use i40 instruments have extra-large (28mm max) digits and razor-sharp LCDs for outstanding visibility in all lighting conditions.



i40 Speed



i40 Bidata



i40 Wind

RAYMARINE WIRELESS

You need instant access to accurate data and displays that are absolutely reliable. Raymarine Wireless instruments display all the data you'll need and there are no wires running through your hull or down your mast.



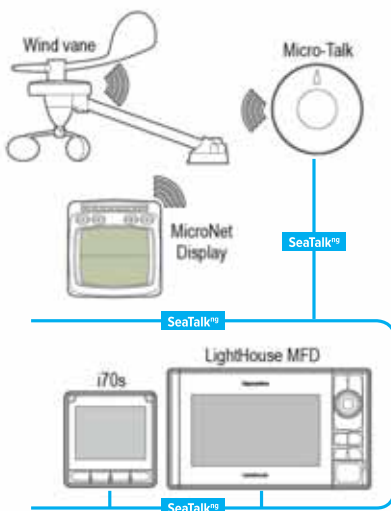
RACING INSTRUMENTS

You want the best chance of crossing the line first. You need instant access to accurate data, and displays that are absolutely reliable. Raymarine wireless instruments display all the data you'll need and

have user-configurable pages, crucial for racing performance and there are no wires running through your hull or down your mast.

CRUISING INSTRUMENTS

Cruising the open oceans, your peace of mind depends on having accurate and visible data. The range provides all this in a system designed to be completely flexible. They are simple to install with no holes to drill in your bulkhead or wires to thread down your mast.



MICRO-TALK WIRELESS PERFORMANCE SAILING GATEWAY

The Micro-Talk gateway provides a link between the Raymarine wireless Micronet system and the Raymarine SeaTalk^{ng} network. Benefits include:

- Performance sailing with wireless wind enhancement on your Raymarine MFD; with accurate lay lines
- Use the power of your Raymarine MFD to inspire enhanced competitive sailing
- True wind achieved with sophisticated airflow and yaw algorithms
- Provides real-time data with robust and fast refresh rate
- Mast rotation position sensing, for wing sail boats
- Quick installation, light and wireless connection to wind vane
- Low power when used with Raymarine solar-powered wireless devices



WIRELESS REMOTE

Not just a remote control. More an essential item of equipment for those serious about winning.

The Raymarine Wireless Remote Display controls, configures and repeats all the data you need to improve performance.



MICRO COMPASS

Micro Compass gives you a massive racing advantage. It is light, easy to read, reliable and precise. The Micro Compass's tactical scale gives you clear stable figures for port and starboard tacks. Simple twin display for easy wind shift alert. Great aid to training.



RACE MASTER

The ultimate tactical race compass and wind shift indicator. Its two-tier display shows your heading, how far you're above or below the mean course, and how much you're being headed or lifted. It will enable you to quickly and easily establish the favoured end of the start line, and will help you sail the shortest distance to the windward mark. Downwind, you can see how far off dead downwind you are and when you should gybe for optimal VMG.



DIGITAL SWITCHING VESSEL SYSTEM CONTROL AND AUTOMATION

Raymarine Digital Switching brings all the power and convenience of advanced home automation to your boat. Digital Switching allows you to control onboard electrical and electronic systems like lighting, air-conditioning, navigation lights, wipers, horns, entertainment systems, security systems and much more from your network-connected multifunction displays, smartphone or tablet.





Raymarine Digital Switching replaces the standard mechanical circuit breakers and switches with state-of-the-art digital power distribution. This system not only offers convenience and ease-of-use, it also delivers on the promise of seamless, reliable operation as well as simple and cost-effective installation.

MOBILE DEVICES

With Raymarine Control and Remote Apps, you can take control using a tablet or smartphone.



Trim tabs



Bilge Pumps



AC and DC Power





DIGITAL SWITCHING: ELEGANT SIMPLICITY

Instead of bulky and expensive switch panels, Raymarine's Digital Switching system uses rugged and compact digital Circuit Control Modules (CCMs.) Each CCM supports multiple circuits that are customised to meet the exact needs of the equipment being controlled.

Each CCM connects to the vessel's existing NMEA 2000 network backbone allowing it to communicate with other CCMs and multifunction displays onboard. This flexible network architecture enables the CCMs to be mounted near the equipment they are controlling. This benefits the boat builder and owner by creating a system that is simpler to install and troubleshoot than traditionally switched systems. Significant cost savings can be easily realised due to the faster installation and reduced amount of cable required to wire the vessel's systems.



CCM: CIRCUIT CONTROL MODULE

The Circuit Control Module (CCM) is a NMEA 2000 device that is connected to the main DC Bus and provides inputs and outputs to the system. With multiple input capabilities and ranges, the CCM is an extremely versatile and cost effective means of interfacing system signals - when combined with the powerful software, complex monitoring and control systems are easily realised.

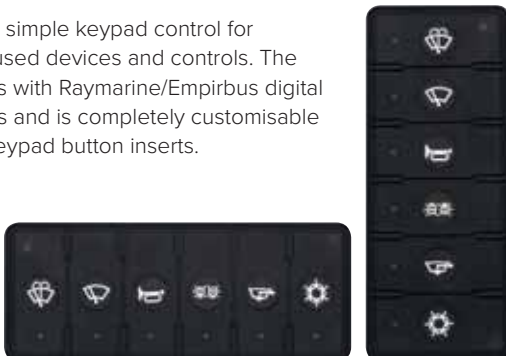
MCU: MASTER CONTROL UNIT

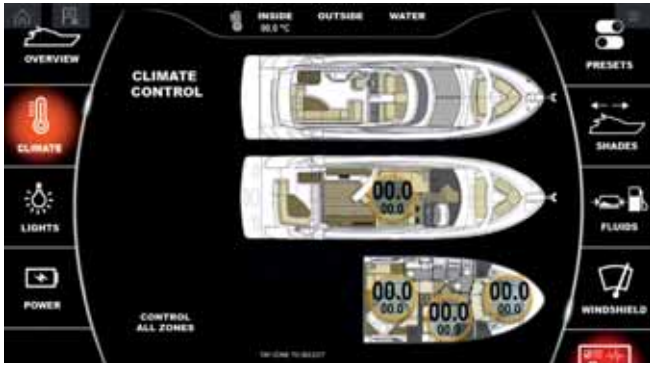
The Master Control Unit is the central processor that drives the system, providing computing power, intelligence and decision making. In addition, there are various interfaces for connection to external devices and a remote control port.

The MCU is a NMEA 2000 device that talks to other system components via the NMEA 2000 network. The MCU stores and executes configuration files for installation; holding data for every DC Module and Membrane Panel present. Should a Module or Membrane panel need to be replaced, the MCU distributes data to the replacement once the base address of the new component has been entered.

NEW RMK-6 PROGRAMMABLE DIGITAL SWITCHING KEYPAD

The RMK-6 offers simple keypad control for most commonly used devices and controls. The keypad integrates with Raymarine/Empirbus digital switching systems and is completely customisable with 20 unique keypad button inserts.





EmpirBus

Raymarine is proud to partner with Trigent AB and integrate with the EmpirBus NXT distributed power supply system. Based in Uddevalla, Sweden, Trigent has over 10 years of experience developing and deploying ruggedised power distribution systems for marine applications and speciality vehicles. Trigent's power distribution products are used by commercial, industrial and military customers around the world.



VHF RADIOS

You'll always be heard loud and clear with a VHF radio from Raymarine. Whether it's the compact Ray50, full-sized Ray60, or multifunction Ray70, you can depend on your Raymarine VHF for years of trouble-free communication at sea.



EVERY RAYMARINE VHF OFFERS

- Simple operation with intuitive icons and menus
- Easy-to-read LCD displays with red backlighting
- Commercial-grade transceivers with stable, powerful output, and high receiver sensitivity
- Sleek, premium designs that match Raymarine Instruments, MFDs and Glass Bridge Displays

RAY260

MODULAR VHF

Premium VHF system with remote transceiver, speaker, and handset. Built-in loudhailer/foghorn plus multi-station intercom capability. Available with an integrated AIS receiver.





PHOTO: © BENETEAU / GUIDO CANTINI



RAYMIC

The Ray70 VHF Radio also supports the optional second station RayMic handset for remote locations. This gives you full-function VHF and intercom capability from a second location onboard.

RAY70

VHF RADIO, AIS RECEIVER, LOUDHAILER AND INTERCOM

Hear and be heard! The Ray70 from Raymarine is the ultimate all-in-one communications solution for Captains who demand the best. Ray70 features full-function VHF, loudhailer output, AIS receiver, and is dual-station capable with the optional RayMic accessory.

RAY60

VHF RADIO WITH DUAL STATION CONTROL AND INTERCOM CAPABILITY

The Ray60 is a full-sized VHF radio that is packed with essential communications features every boater needs.

RAY50 & RAY52

COMPACT VHF

The Ray50 and 52 VHF pack a powerful communications system into a case that is small enough to mount just about anywhere. The Ray52 features integrated GPS for easier DSC communications.



SATELLITE TV ANTENNA SYSTEMS

Raymarine's Satellite TV antennas bring the same combination of high performance and ease-of-use to your onboard entertainment that you would expect from your home entertainment system.





FEATURES

- Compact domes
- Automatically track and receive satellite TV signals in almost any conditions
- Access to hundreds of digital channels
- Quickly identify and acquire satellite signals
- Once you have a fix on the satellite signal, tracking algorithms will help you keep it
- Designed to cope with tough conditions
- Dynamic Beam Tilting (DBT) continuously measures and compensates for your vessel's heading, pitch and roll – keeping your antenna locked on a satellite for a clear picture

DUAL OR QUAD LNB

- Connect multiple television receivers and tune in to different channels on each television
- Dual systems (33 and 37STV) allow the connection of two television receivers and the Quad systems (45 and 60STV) connection of four receivers



SATELLITE TV FEATURES

	33STV	37STV	45STV	60STV
Dual or Quad LNB design for multiple receivers	Dual	Dual	Dual/Quad	Dual/Quad
Dish diameter (cm)	13in (33cm)	14.6in (37cm)	17.7in (45cm)	23.6in (60cm)
DVB (Digital Video Broadcast) Compatible	Y	Y	Y	Y
High Definition (HD) Compatible	Y	Y	Y	Y
iQ2 Quick and Quiet Technology for fast acquisition and silent operation	Y	Y	Y	Y
Wide Range Search Algorithm for high speed search and fast satellite acquisition	Y	Y	Y	Y
Dynamic Beam Tilting (DBT) technology for enhanced signal tracking in extreme weather and sea conditions	Y	Y	Y	Y
Conical scanning detects strongest satellite signal for enhanced stabilization	Y	Y	Y	Y
GPS receiver for reduced acquisition time	Input only	Built-In	Built-In	Built-In
Antenna Elevation Range	10° to 80°	10° to 80°	10° to 90°	10° to 90°
Available Automatic LNB Skew Control	N	N	Y	Y
Extended Elevation Range with Auto Skew			0° to 90°	-15° to 90°
Ethernet and Wi-Fi Enabled for setup, control, diagnostics and updates	Y	Y	Y	Y
Service Areas Available	Americas/Asia	Worldwide	Worldwide	Worldwide
Suggested Vessel Size	20-25ft (6 - 7.6m)	25-35ft (7.6 - 10.7m)	35-50ft (10.7 - 15.2m)	over 50ft (over 15.2m)



AUDIO ENTERTAINMENT POWERED BY ROCKFORD FOSGATE





Raymarine Audio Entertainment powered by Rockford Fosgate provides boaters a full-featured audio command center with audiophile-quality sound and limitless flexibility. The Rockford Fosgate source units can be fully remote controlled from any Raymarine LightHouse II Multifunction display onboard the vessel using NMEA2000 CAN bus networking. Raymarine's custom audio application is designed for ease of use and contains all of the same controls as found on the source unit, including control of all of the individually sourced controls.

Complete the system with marine-grade components from Rockford's full line of Prime™, Punch™, and Power™ speakers, subwoofers and amplifiers. With so many options its easy to tailor the soundscape in each space onboard your boat. You'll enjoy the Rockford Fosgate signature sound everywhere onboard!

The Raymarine audio system powered by Rockford Fosgate is a high-performance, multi-zone audio system designed for premium sound and maximum flexibility.

- Remote controllable from both Raymarine MFDs and Rockford Fosgate remotes both above and below decks
- Multi-zone systems allow independent music source selection, playback and control from anywhere onboard
- Element Ready™ components engineered for extreme duty in the marine environment while providing Rockford Fosgate's signature sound

EFFORTLESS CONTROL

- Control the system from Raymarine's audio application on LightHouse MFDs
- Wireless control from Smartphone or Tablet with Raymarine's RayControl app
- Rockford Fosgate wired remote displays are also available in a range of sizes and configurations


SCALABLE SYSTEMS

- Supports up to 3 input sources and 4 independently controlled output zones (PMX-8BB)
- Choose from Rockford Fosgate's wide array of speakers and amplifiers to tailor the sound to each space
- Android, iPhone, Bluetooth, and USB
- Source selection plus AM, FM, TM and Auxiliary input


SOURCE UNITS
Element Ready source units provides you a solution no matter how large or small of a system you want to design.




SPEAKERS
Built to withstand the marine environment, our speakers deliver high-quality sounds for you to enjoy.




WAKE CAN SPEAKERS
When you want to enjoy the music even at the end of the tow rope, mount a set of Rockford Fosgate speaker enclosures and turn up the volume.



AMPLIFIERS
Packed with power, Rockford Fosgate amplifiers are specifically engineered to perform out in the elements.



SUBWOOFERS
Rockford engineers its woofers to produce high output bass without crumbling when exposed to the elements.



SPECIFICATIONS

ALL PRODUCTS

AXIOM

SPECIFICATIONS

SCREEN SIZE

7.0" Optically Bonded LCD
 9.0" Optically Bonded LCD
 12.1" IPS Optically Bonded LCD

DISPLAY RESOLUTION

Axiom 7 800 x 480 WVGA
 Axiom 9 800 x 480 WVGA
 Axiom 12 1280 x 800 WXGA

SCREEN TYPE

Touchscreen

MOUNTING OPTIONS

Top / Flush / Bracket / Rear Mounting

NETWORKING

1 x 10/100 Mbps/ Network (RayNet)

WATERPROOFING

IPX6 / IPX7

MEMORY CARD SLOT

1x MicroSD. Support for external SD/USB card reader

Wi-Fi

WiFi - 802.11 b / g

RADAR COMPATIBLE

Yes

THERMAL NIGHT VISION COMPATIBLE

Yes – compatible with FLIR M100 and M200 cameras

VIDEO OVER IP CAMERA SUPPORT

Add up to 10 Video over IP network cameras

BUILT-IN SONAR

3D RealVision or DownVision - model dependent

EXTERNAL SONAR COMPATIBLE

Yes – support for Digital and CHIRP sonar modules

GPS

Built-in GNSS Receiver: GPS/GLONASS/Beidou* - 10Hz 72 Channel

OPTIONAL REMOTE CONTROLS

RMK-10

AIS

With optional receivers and transceivers

AUDIO INTEGRATION

Support for NMEA2000 compatible audio devices

VOLTAGE

12V DC (8 V to 16 VDC)

OPERATING TEMPERATURE

-13° F to +131° F (-25° C to +55° C)

NMEA2000

NMEA2000 via DeviceNet port. SeaTalk^{ng} compatible using an optional adapter

DIMENSIONS

	AXIOM 7		AXIOM 9		AXIOM 12	
	mm	in	mm	in	mm	in
A	250.4	9.86	265.03	10.43	314	12.36
B	133	5.24	157.78	6.21	217	8.54
C	162.5	6.4	187.8	7.39	226.8	8.93
D	76.4	3.0	76.71	3.02	76.2	3
E	218	8.59	178	7.01	178	7.01
F	250.4	9.86	265.03	10.43		

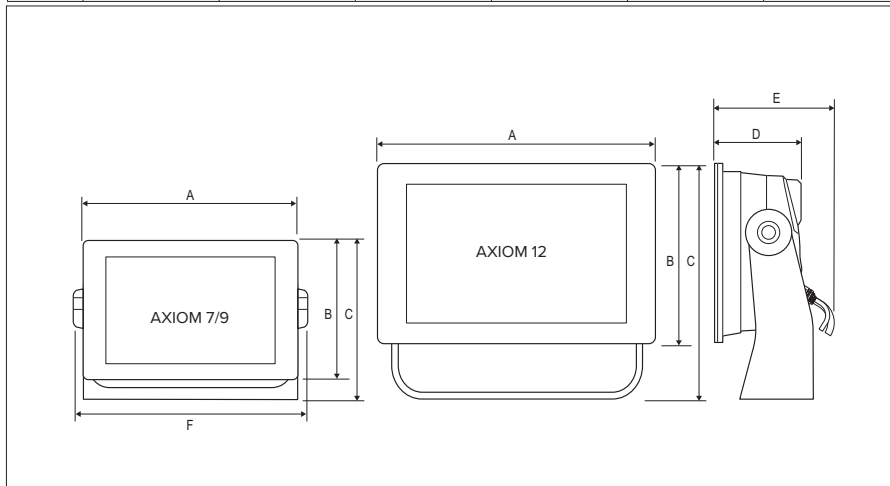
WHAT'S IN THE BOX

AXIOM 7

- (1) Display (supplied with Trunnion adaptor fitted)
- (2) Trunnion bracket
- (3) Trunnion knobs x 2
- (4) Suncover — Trunnion mount
- (5) Panel mount gasket for surface/flush mounting
- (6) M5x58 Threaded studs x 4
- (7) M5 Thumb nuts x 4
- (8) Documentation pack
- (9) Power/NMEA 2000 cable (with 1.5 m (4.92 ft) power lead and 0.5 m (1.64 ft) NMEA 2000 lead).

AXIOM 9 AND 12

- (1) Display
- (2) Trunnion bracket
- (3) Trunnion knobs x 2
- (4) Suncover
- (5) Panel mount gasket for surface/flush mounting
- (6) Rear mounting brackets: a. supplied with 9" MFD | b. supplied with 12" MFD
- (7) Documentation pack
- (8) Power/NMEA 2000 cable (with 1.5 m (4.92 ft) power lead and 0.5 m (1.64 ft) NMEA 2000 lead)
- (9) M5x58 Threaded studs x 4
- (10) M5 Thumb nuts x 4



AXIOM PRO

SPECIFICATIONS

SCREEN SIZE

Axiom Pro 9: 9" Optically Bonded HD IPS LCD
 Axiom Pro 12: 12" Optically Bonded HD IPS LCD
 Axiom Pro 16: 15.6" Optically Bonded HDIPS LCD

DISPLAY RESOLUTION

Axiom Pro 9 1280 x 720 pixels
 Axiom Pro 12 1280 x 800 pixels
 Axiom Pro 16 1920 x 1080 pixels

SCREEN TYPE

Super bright high definition IPS display with optical bonding. Multitouch support

MOUNTING OPTIONS

Top / Flush / Bracket / Rear Mounting (Axiom Pro 16 front only)

VOLTAGE

12 / 24 V dc

ETHERNET

2 x 10/100 Mbps/ Network (RayNet)

NMEA2000

1 x NMEA2000 port (DeviceNet microC)

NMEA0183

x2 NMEA 0183 input and x1 NMEA 0183 output (part of power cable)

WATERPROOFING

IPX6 / IPX7

MEMORY

16GB Internal / x2 microSDXC slots

Wi-Fi

WiFi - 802.11 b / g

RADAR COMPATIBLE

Yes

THERMAL NIGHT VISION COMPATIBLE

Compatible with all FLIR thermal cameras

VIDEO

Up to 8 video sources and 1 analogue video input

BUILT-IN SONAR

RealVision 3D & 1kW CHIRP Sonar built in – RVX models only. High CHIRP Sonar built in – S models only

EXTERNAL SONAR COMPATIBLE

Yes – support for Digital and CHIRP sonar modules

GPS

Built-in GNSS Receiver: GPS/GLONASS/Beidou - 10Hz 167 Channel | External Accessory: GA150 (A80288)

OPTIONAL REMOTE CONTROLS

RMK-10

AIS

With optional receivers and transceivers

AUDIO INTEGRATION

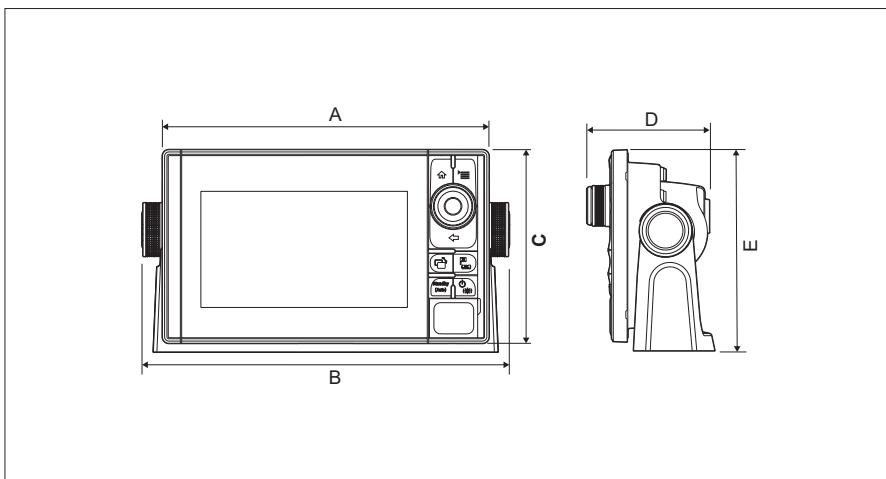
Support for NMEA2000 compatible audio devices

OPERATING TEMPERATURE

-13° F to +131° F (-25° C to +55° C)

DIMENSIONS

	AXIOM PRO 9		AXIOM PRO 12		AXIOM PRO 16	
	mm	in	mm	in	mm	in
A	299.32	11.78	358	14.1	452	17.8"
B	329.5	12.97	388.5	15.3	–	–
C	173.8	6.84	222.8	8.77	258	10.2
D	97.9	3.85	96.3	3.79	101.8	4.0
E	186.2	7.3	246.13	9.69	–	–



WHAT'S IN THE BOX

AXIOM PRO 9 AND 12

- (1) Display
- (2) Trim Kit
- (3) Suncover
- (4) Trunnion Kit
- (5) PWR/VIDEO/NMEA0183 CBL, STRT 1.5M
- (6) Mounting Hardware
- (7) Mounting Template
- (8) Quick Start Guide
- (9) Warranty Card
- (10) Raymarine window decal

AXIOM PRO 16

- (1) Display
- (2) Trim Kit
- (3) Suncover
- (4) PWR/VIDEO/NMEA0183 CBL, STRT 1.5M
- (5) Mounting Hardware
- (6) Mounting Template
- (7) Quick Start Guide
- (8) Warranty Card
- (9) Raymarine window decal

gS SERIES SPECIFICATIONS

SPECIFICATIONS

LCD SCREEN SIZES

gS95: 9.00in | gS125: 12.1in | gS165: 15.4in | gS195: 19.0in

DISPLAY RESOLUTION

gS95: 800x480 | gS125: 1280x800 | gS165: 1280x800 | gS195: 1280x1024

TOUCH SCREEN

Multi-touch with pinch-to-zoom

GPS

Requires external GPS sensor (RS150 recommended)

MOUNTING OPTIONS

Flush or surface mount

WATERPROOF RATING

IPX6

MEMORY CARD READER

Dual MicroSD external card reader for charts and data

INTERFACES

NMEA0183 / SeaTalk^{ng} / Raynet
 HD SDI video port (gS195 only)
 Analogue Video Input
 HDMI Video Output
 Auxiliary Alarm Output

POWER REQUIREMENTS

12V or 24V systems

MULTI-LANGUAGE

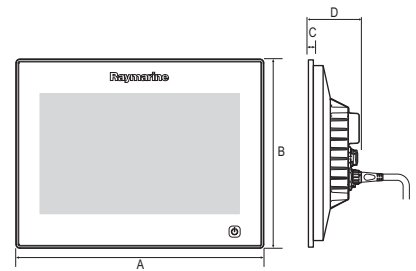
Yes

WHAT'S IN THE BOX

- (1) Multifunction display
- (2) 2x Display mounting brackets
- (3) RCR-2 Remote Card Reader
- (4) Mounting gasket for RCR-2
- (5) Document pack
- (6) RCR-2 inlay card x2
- (7) Sun cover
- (8) 4x Mounting bolts, washers, lock nuts and feet
- (9) 4x Bracket fixings
- (10) 4x RCR-2 fixings (self tapping screws)
- (11) 10x M5 pan head screw (not supplied with gS95)
- (12) M5 Wavy washer (for additional grounding strap)
- (13) 1.5m (4.9 ft) Power / Data cable
- (14) 2m (6.6 ft) Video / Alarm cable
- (15) Display mounting gasket
- (16) 2m (6.6 ft) RayNet cable
- (17) Auxiliary alarm
- (18) 1m (3.28 ft) SeaTalk^{ng} spur cable

gS SERIES DIMENSIONS

	A		B		C		D	
	mm	in	mm	in	mm	in	mm	in
gS95	246.8	9.7	188.2	7.4	8.0	0.3	69.0	2.72
gS125	311.8	12.3	237.0	9.3	8.0	0.3	70.0	2.75
gS165	383.2	15.0	284.7	11.2	8.0	0.3	69.0	2.72
gS195	433.9	17.1	391.2	15.4	8.0	0.3	75.9	3.0



VIDEO CAMERA SPECIFICATIONS

SPECIFICATIONS

FORMAT

CAM50: PAL 500 x 582 pixels
 NTSC 512 x 492 pixels

CAM100: PAL 752 x 582 pixels
 NTSC 768 x 494 pixels

CAM2XX: Up to 1920 x 1080 (FHD)

IMAGE SENSOR

CAM50: 1/3 Sony DSP Color CCD

CAM100: 1/3 Sony Super HAD CCD
 (Super Hi-resolution)

CAM2XX: 2.0 Megapixel 1/2.8" SONY
 progressive scan, CMOS (Exmor)

WATERPROOF RATING

CAM50: IP63

CAM100: IPX6 and CFR46

CAM2XX: IP67

LENS

CAM50: 3.6mm Best focus - 1.5m
 Viewable distance - 3.5m

CAM200: 6.0mm Megapixel Board Lens

CAM210: 3.6mm Megapixel

CAM220: 6.0mm Megapixel

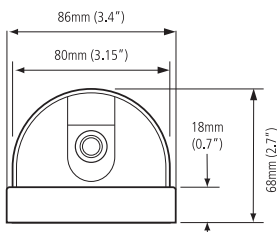
POWER

CAM50: 12V DC (+30% -10%)

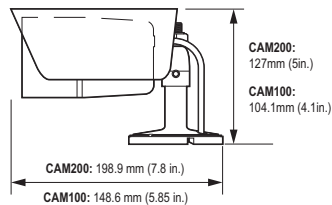
CAM100: 12V DC (+30% -10%)

CAM2XX: DC12V/1.5A, PoE (Power over Ethernet); 802.3af-Optional

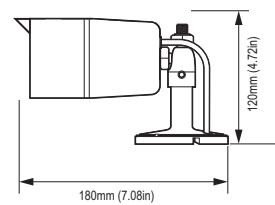
CAM50



CAM100/200IP



CAM210IP



RADAR SPECIFICATIONS

SPECIFICATIONS

QUANTUM

INPUT VOLTAGE:

12 – 24 Vdc (Min: 10.8 V, Max: 31.2 V)

NETWORKING:

Wi-Fi or wired Ethernet (RayNet)

ANTENNA TYPE:

Patch Array

MAXIMUM RANGE SCALE:

24 nm

WATERPROOFING:

IPX6

HD COLOR RADOMES

INPUT VOLTAGE:

12–24 Vdc

NETWORKING:

SeaTalk™

PEAK POWER OUTPUT:

4kW (nominal)

MAXIMUM RANGE SCALE:

48 nm

WATERPROOFING:

IPX6

HD & SUPER HD COLOR

OPEN ARRAYS

INPUT VOLTAGE:

10.8–32 Vdc (using VCM100)

NETWORKING:

Raynet

PEAK POWER OUTPUT:

48" and 72" HD and SHD available in 4kW or 12kW options

MAXIMUM RANGE SCALE:

72 nm

WATERPROOFING:

IPX6

WHAT'S IN THE BOX

QUANTUM

- (1) Quantum Radome
- (2) Power Cable
- (3) Installation kit
- (4) Documentation including installation template

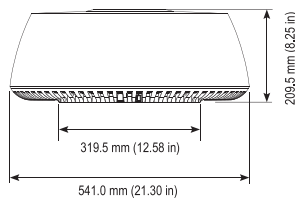
RADOME

- (1) Radome Scanner
- (2) Installation kit
- (3) Documentation including Installation template

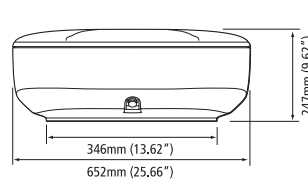
OPEN ARRAYS

- (1) Pedestal
- (2) VCM100 Voltage Converter Module
- (3) Installation kit
- (4) Documentation including installation template

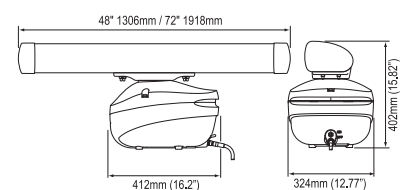
QUANTUM



24" RADOME



OPEN ARRAYS



DRAGONFLY SPECIFICATIONS

SPECIFICATIONS

LCD SCREEN SIZES

Dragonfly-4: 4.3in

Dragonfly-5: 5.0in

Dragonfly-7 PRO: 7.0in

DISPLAY RESOLUTION

Dragonfly-4: 480x272

Dragonfly-5: 800x480

Dragonfly-7 PRO: 800x480

SONAR TYPE (EXCEPT 5M)

CHIRP Sonar - CPT-60 dual-beam CHIRP transducer supplied with product (check ordering information)(Cable length 6m)

DEPTH RANGE (EXCEPT 5M)

CHIRP DownVision™ 183m (600ft) and CHIRP Sonar imagery 275m (900ft)

GPS

Dragonfly 4/5/7-PRO: 72 channel GPS

CHART COMPATIBILITY

Support for Navionics, C-MAP and Raymarine LightHouse chart formats on microSD cards

MOUNTING OPTIONS

Ball and socket bracket or surface mount

WATERPROOF RATING

IPX6/IPX7

MEMORY CARD READER

MicroSD

CONNECTIONS

Power/transducer combined input

POWER REQUIREMENTS

10.8–15.6V

WHAT'S IN THE BOX

DRAGONFLY-4 AND 5 DV/DVS/PRO/ 7 PRO

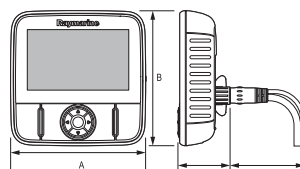
- (1) Display unit
- (2) Locking collar
- (3) Pivot ball
- (4) M6 Hex bolt
- (5) Display bracket base
- (6) x3 M5 pozi-drive bolt
- (7) x3 M5 washers
- (8) x3 M5 locking nut
- (9) Documentation
- (10) Mounting bracket
- (11) M5 Hex ratchet bolt
- (12) Ratchet plate
- (13) Compression washer
- (14) M5 washer
- (15) M5 locking nut
- (16) x3 self-tapping screws
- (17) Documentation
- (18) Transducer with combined power cable

DRAGONFLY 5M

Items 1 to 9 as above plus 1.5m (4.9ft) power cable.

DRAGONFLY DIMENSIONS

	A		B		C		D	
	mm	in	mm	in	mm	in	mm	in
DF-4	145	5.7	145	5.7	56	2.2	90	3.5
DF-5	145	5.7	145	5.7	56	2.2	90	3.5
DF-7 PRO	199	7.83	178	7.0	62.2	2.45	90	3.5
Wi-Fish	145	5.7	145	5.7	54	2.1	90	3.5



CP100/CP200 SONAR SPECIFICATIONS

SPECIFICATIONS		
<p>CP100</p> <p>SONAR TYPE CHIRP</p> <p>CHANNELS 2x CHIRP DownVision plus a high frequency CHIRP channel for fish targeting</p> <p>NOMINAL SUPPLY VOLTAGE 12/24V DC Systems</p> <p>OPERATING VOLTAGE RANGE 10.2 - 32 V DC</p> <p>POWER CONSUMPTION AT FULL POWER 3W</p>	<p>CONNECTIONS Power (power cable), transducer (9 pin connector), and Raynet network connector</p> <p>TRANSDUCER INFO Max depth DownVision - 600ft, CHIRP - 900ft.</p> <p>CP200</p> <p>SONAR TYPE CHIRP SideVision</p> <p>CHANNELS 2 x CHIRP SideVision™ (port and starboard)</p> <p>NOMINAL SUPPLY VOLTAGE 12/24V DC Systems</p>	<p>OPERATING VOLTAGE RANGE 10.8 - 32 V DC</p> <p>POWER CONSUMPTION AT FULL POWER 5.6W (Max)</p> <p>CONNECTIONS Power (power cable), transducer (9 pin connector), and Raynet network connector</p> <p>BEAM COVERAGE Port and starboard facing fan beams - wide (port / starboard) and thin (fore / aft)</p> <p>TRANSDUCER INFO Range performance up to 183m (600ft)</p>

CP100	CP200	WHAT'S IN THE BOX
		<ul style="list-style-type: none"> (1) Sonar module (2) Documentation pack (3) Mounting screws (4) Power cable 1 m (3.28 ft)

CP370/CP470/570 SONAR SPECIFICATIONS

SPECIFICATIONS		
<p>CP370</p> <p>SONAR TYPE Digital</p> <p>POWER 600W / 1000W Depending on transducer</p> <p>FREQUENCY & CHANNELS Fixed frequency 50KHz and 200KHz channels</p> <p>DEPTH RANGE 5000ft. (1,500m)</p> <p>WATERPROOFING STANDARD IPX6</p> <p>NOMINAL SUPPLY VOLTAGE 12/24 V DC</p> <p>CONNECTIONS Power connection Network connection (RayNet connector) 10/100 Mb/s Transducer connection</p>	<p>CP470/CP570</p> <p>SONAR TYPE Wide Spectrum CHIRP</p> <p>POWER CP470: 1kW / 2kW depending on transducer CP570: Max 4kW output using 2 independent CHIRP channels</p> <p>FREQUENCY & CHANNELS CP470: Dual CHIRP from 25 to 250kHz CP570: Dual independent CHIRP channels from 25 to 250kHz</p> <p>DEPTH RANGE 10,000ft (3,000m)</p> <p>WATERPROOFING STANDARD IPX6</p>	<p>NOMINAL SUPPLY VOLTAGE 12/24 V DC</p> <p>CONNECTIONS Power connection Network connection (RayNet connector) 10/100 Mb/s Transducer connection</p>

CP370	CP470/CP570	WHAT'S IN THE BOX
		<ul style="list-style-type: none"> (1) Sonar Module (2) Power Cable (3) Fixing Screws (4) Documentation Pack (5) RayNet Cable

AUTOPILOT SPECIFICATIONS

SPECIFICATIONS

p70s/p70Rs

NOMINAL VOLTAGE

12V

SCREEN SIZE

3.5" TFT LCD 320 x 240 pixels

CONNECTIONS

SeaTalk^{ng} (x2) and SeaTalk1 Compatible

WATERPROOFING

IPX6

EV1/EV2

NOMINAL VOLTAGE

12V (powered by SeaTalk^{ng} system)

CONNECTIONS

SeaTalk^{ng} | NMEA 2000

DeviceNet (EV-2 only)

SENSORS

3-axis digital accelerometer | 3-axis digital compass | 3-axis gyro digital angular rate sensor

ACU-100/150

NOMINAL VOLTAGE

12V

DATA CONNECTIONS

SeaTalk^{ng}

WATERPROOFING

Connector panel IPX2, Drive electronics - IPX6

ACU-200/300/400

NOMINAL VOLTAGE

12V or 24V

DATA CONNECTIONS

SeaTalk^{ng}

Waterproofing: Drip resistant

FOLLOW ON TILLER

STEERING ANGLE:

+/- 35 degrees

MOUNTING OPTION:

Surface mount

ENVIRONMENT:

Above deck to IPX6 and IPX7

POWER SUPPLY:

12V DC Via ST^{ng}

CURRENT CONSUMPTION:

30mA (1 LEN)

HOUSING:

Front, anodized front panel, with rubberized keypad.

TEMPERATURE:

Operating -25 °C to +55 °C.

Storage temperature -30 °C to +70 °C

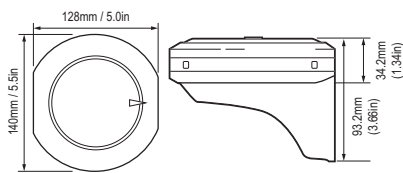
WEIGHT:

447g (15.77 oz)

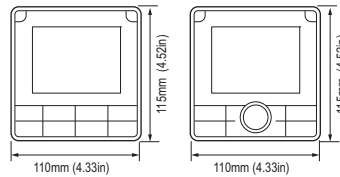
DIMENSIONS:

55mm (Width) x 133mm (Length) x 13mm (Height above mounting surface) / 20.4mm (Height below mounting surface) – Arm length 79.6mm

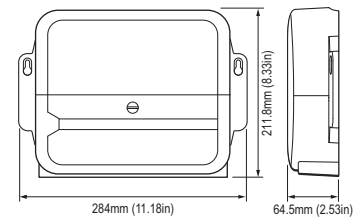
EV1 / EV2



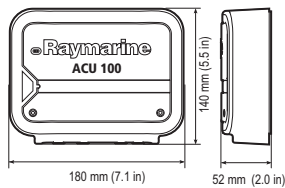
P70S / P70RS



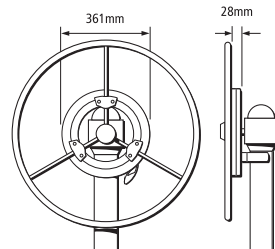
ACU 200/300/400



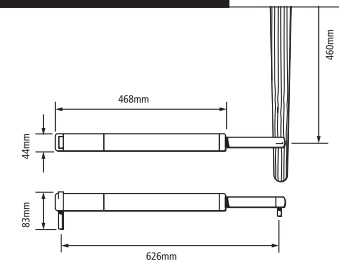
ACU 100/150



WHEEL DRIVE



TILLER DRIVE



WHAT'S IN THE BOX

EV1/EV2

- (1) Mounting Trim
- (2) EV-1/EV-2
- (3) Sealing ring
- (4) Mounting tray
- (5) Sealing ring

WHAT'S IN THE BOX

ACU 100/150

- (1) ACU Unit
- (2) Documentation pack
- (3) Screws (pan head type)
- (4) SeaTalk^{ng} spur to bare wires cable 1m (3.3ft)

WHAT'S IN THE BOX

ACU 200/300/400

- (1) ACU Unit
- (2) Documentation pack
- (3) ACU SeaTalk^{ng} spur power cable 0.3m (1.0ft)
- (4) Rudder reference unit (if supplied; refer to separate installation sheet for list of parts supplied)
- (5) Screw pack, consisting of: Cable ties; Pan head screw; Countersunk screw.

THERMAL CAMERAS

SPECIFICATIONS

AX8

IR RESOLUTION

80x60 pixels

FOCUS

Fixed

FIELD OF VIEW

48° x 37°

DETECTOR TYPE

Focal Plane Array (FPA) Uncooled Microbolometer

BUILT-IN DIGITAL CAMERA

640x480

MEASUREMENT

-10°C to +150°C (14°F to 302°F)

WATERPROOF RATING

IP67 (IEC 60529)

ETHERNET POWER

Power over Ethernet, PoE IEEE

802.3as class 0

OCEAN SCOUT

DETECTOR TYPE

OS240: 240 x 180 VOx Microbolometer

OS320: 336 x 256 VOx Microbolometer

OS640: 640 x 512 VOx Microbolometer

VIDEO REFRESH RATE

<9Hz NTSC or 30 Hz

FIELD OF VIEW (HXV)

OS240: 24° x 18° NTSC

OS320: 17° x 13° NTSC

OS640: 18° x 14° NTSC

DISPLAY

640 x 480 LCD Display

BATTERY TYPE

Internal Li-ion cell

BATTERY LIFE

Up to 5 hours

WATERPROOF RATING

IP67, submersible

OCEAN SCOUT TK

DETECTOR TYPE

160 x 120 VOx Microbolometer

VIDEO REFRESH RATE

<9Hz

FIELD OF VIEW (HXV)

20° x 16°

DISPLAY

640 x 480 LCD Display

BATTERY TYPE

Internal Li-ion cell

BATTERY LIFE

Up to 5 hours

M132 / M232

DETECTOR TYPE

320 x 240 VOx Microbolometer

VIDEO REFRESH RATE

<9Hz

FIELD OF VIEW (HXV)

24° x 18°

E-ZOOM

2x

IMAGE PROCESSING

FLIR Proprietary Digital Detail Enhancement

PAN AND TILT RANGE

M132: Tilt: +110°, -90°

M232: Tilt: +110°, -90° / Pan 360deg (continuous)

VIDEO OUTPUT

H264 IP Video stream

POWER REQUIREMENTS

12 or 24 VDC

WHAT'S IN THE BOX

OCEAN SCOUT

- (1) Ocean Scout thermal camera
- (2) Drawstring pouch
- (3) USB cable
- (4) Lens cover
- (5) Wrist wrap
- (6) Camera

WHAT'S IN THE BOX

AX8

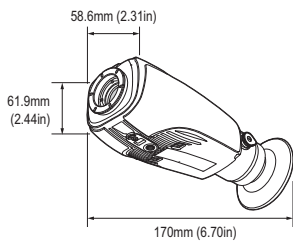
- (1) Infrared camera with lens
- (2) Printed documentation
- (3) User documentation CD-ROM
- (4) Cooling/mounting plate
- (5) POE injector
- (6) Camera PoE Cable
- (7) Raymarine RayNet Ethernet cable

WHAT'S IN THE BOX

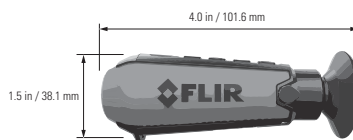
M132/M232

- (1) Thermal camera
- (2) Base Seal
- (3) Fixings
- (4) Self adhesive deacals
- (5) RayNet to RJ45 adaptor cable
- (6) Right angled RayNet to RayNet cable
- (7) Right angled 3-pin power cable
- (8) Top down riser
- (9) Documentation

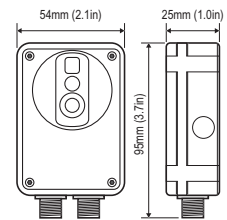
OCEAN SCOUT



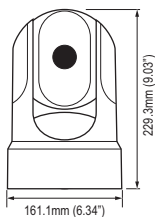
OCEAN SCOUT TK



AX8



M100 /M200



INSTRUMENTS

SPECIFICATIONS

NOMINAL VOLTAGE

i40/i50/i60: 12Vdc

WATERPROOFING

IPX6

CONNECTIONS

i40: SeaTalk, Transducer connections.

i50/i60: 2x SeaTalk^{ng} and transducers

Compatible with marine industry CAN systems

i70s: SeaTalk^{ng} - compliant with NMEA2000

and SeaTalk specifications

Compatible with marine industry CAN systems

NOMINAL VOLTAGE

i40/i50/i60: 12Vdc

WHAT'S IN THE BOX

i50/i60

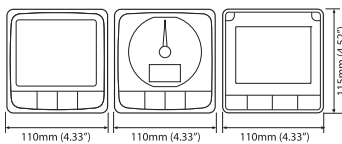
- (1) i50 Instrument
- (2) Front Bezel x2
- (3) SeaTalk^{ng} Spur Cable
- (4) Gasket
- (5) Suncover x2
- (6) Documentation Pack
- (7) SeaTalk^{ng} blanking plug
- (8) 4x Fixing Screws

WHAT'S IN THE BOX

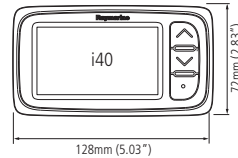
/i70

- (1) i50 Instrument
- (2) Front Bezel
- (3) SeaTalk^{ng} Spur Cable
- (4) Gasket
- (5) Suncover
- (6) Documentation Pack
- (7) SeaTalk^{ng} blanking plug
- (8) 4x Fixing Screws

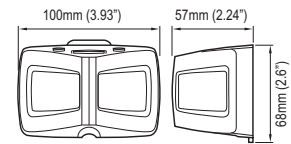
i50 / i60 / i70



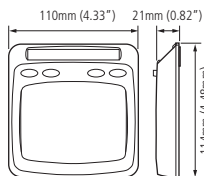
i40



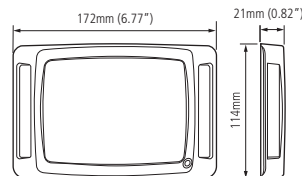
MICRO COMPASS



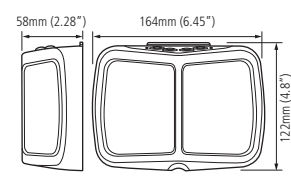
T100



T200



RACEMASTER



DIGITAL SWITCHING

SPECIFICATIONS

CIRCUIT CONTROL MODULE (CCM):

OUTPUTS

- Configurable fuse setting up to 18A
- High and low-side options for reversible function
- Dimming function, including soft start/stop
- Under-current circuit detection

INPUTS

- Configurable thresholds for alarms and/or graphical functions
- Plus or minus sensing for digital
- Analogue inputs for voltage (0-32V), current (4-20mA) or resistive

MULTIPLEXED CHANNELS

Up to 4 circuits may be multiplexed onto a single channel

TANK MONITORING

Calibration with set points

WINDOW WIPER FUNCTIONS

High/low speed, interval etc...

MASTER CONTROL UNIT (MCU):

The Master Control Unit (MCU) provides numerous benefits to the existing Circuit Control Modules (CCMs):

- In larger systems, the MCU stores the full configuration and ensures effective communication between CCMs.
- The MCU-200 adds GSM capabilities to the system. A dedicated SIM card slot allows the MCU-200 to connect to a mobile GSM network and communicate with a smartphone via text messaging.
- The MCU-150 offers a dedicated CAN-bus link to third-party systems such as air conditioning, battery management etc.

AIS

SPECIFICATIONS

AIS350

TRANSMITTER TYPE
Listen only AIS receiver

RECEIVERS
2 Receivers

OPERATING VOLTAGE RANGE
9.6V - 31.2V DC

AIS650

TRANSMITTER TYPE
Class B AIS transceiver

RECEIVERS
2 Receivers

TRANSMITTERS
1 Transmitter

OPERATING VOLTAGE RANGE
9.6V - 31.2V DC

AIS950

TRANSMITTER TYPE
Class A AIS transceiver

RECEIVERS
2x TDMA 156.025 MHz to 162.025 MHz and 1x DSC 156.525 (channel 70)

TRANSMITTERS
1 Transmitter

GPS RECEIVERS (AIS INTERNAL)
IEC 61108-1 compliant

OPERATING VOLTAGE RANGE
10.8 to 31.2v DC

AIS700

TRANSMITTER TYPE
Class B AIS transceiver

RECEIVERS
2 Receivers

TRANSMITTERS
1 Transmitter

OPERATING FREQUENCY RANGE
• Transmitting: 156.0MHz to 162.025 MHz
• Receiving: 156.0MHz

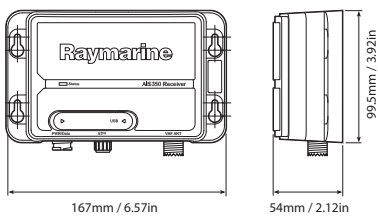
CHANNEL SPACING
25 KHz

AIS PERFORMANCE
5 W SOTDMA

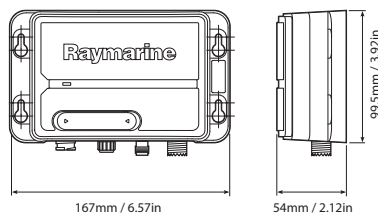
GPS RECEIVER
Channels: 72
Cold start acquisition: 26s nominal
Position source: GPS / GLONASS

OPERATING VOLTAGE RANGE
9.6 V dc to 31.2 V dc

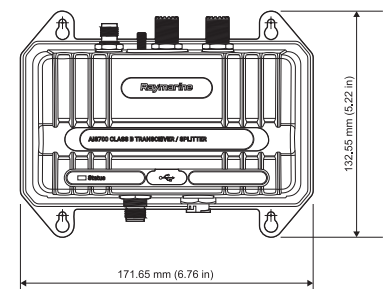
AIS650



AIS650



AIS700



WHAT'S IN THE BOX

AIS 350/650

- (1) AIS unit
- (2) Documentation pack
- (3) Fixing screws
- (4) SeaTalk¹⁹ dust cap
- (5) 2m (6.5ft.) power / data cable
- (6) 1m (3.25ft.) SeaTalkng spur cable

Note: AIS 650 includes GPS

WHAT'S IN THE BOX

AIS 700

- (1) AIS700
- (2) GNSS antenna
- (3) Power/data cable 2m (6.56 ft)
- (4) VHF Radio cable 1m (3.28 ft)
- (5) DeviceNet to SeaTalk¹⁹ adaptor cable 1m (3.28 ft)
- (6) GNSS antenna gasket
- (7) GNSS antenna pole mount
- (8) Unit fixings (4 x No.8x19 self tapping screws)
- (9) M5 nut and washer (grounding)
- (10) Documentation
- (11) GNSS antenna fixings (3 x M3x40 stud and thumb nut)
- (12) Software CD

VHF RADIOS

SPECIFICATIONS

RAY50/60/70

OPERATING VOLTAGE

9V DC to 16V DC

WATERPROOFING STANDARD

Ray50/60/70: IPX6/IPX7 complies with EN60945

COMMUNICATIONS PORT

NMEA 0183 (version 4.01);

NMEA2000 (version 3.0)

POWER OUTPUT

High Power = 25 Watt

Low Power = 1 Watt

RAY260

OPERATING VOLTAGE

10.8 to 15.6V

WATERPROOFING STANDARD

IPX7

HAILER OUTPUT POWER

30 W max.

POWER OUTPUT

High Power = 25 Watt

Low Power = 1 Watt

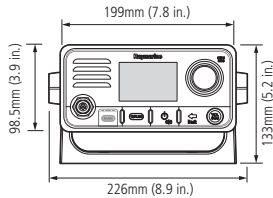
AIS RECEIVER

Optional, Dual Channel

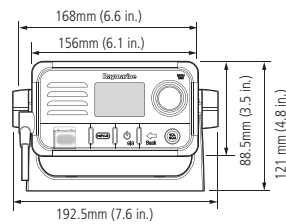
MULTI-STATION

Yes (up to 3 stations)

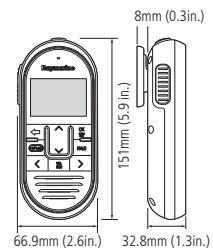
RAY60/70



RAY50



RAYMIC



WHAT'S IN THE BOX

RAY50

- (1) Ray50 with Fistic
- (2) Suncover
- (3) Panel mount gasket
- (4) Mounting bracket
- (5) Mounting bracket knobs
- (6) Fistic mounting clip
- (7) 4x Mounting bracket fixings
- (8) Documentation
- (9) 4x panel mount fixings
- (10) Protective antenna boot
- (11) 2x Fistic mounting clip fixings
- (12) SeaTalk^{ng} 400mm (15.7in.) spur cable

WHAT'S IN THE BOX

RAY60/70

- (1) Ray60 / Ray70 radio
- (2) Sun cover
- (3) Flush mount gasket
- (4) Fistic
- (5) Mounting bracket
- (6) Mounting bracket knobs
- (7) Fistic mounting clip
- (8) Documentation
- (9) Protective antenna boot
- (10) 2x Fistic mounting clip fixings
- (11) SeaTalk^{ng} 400mm (15.7in.) spur cable

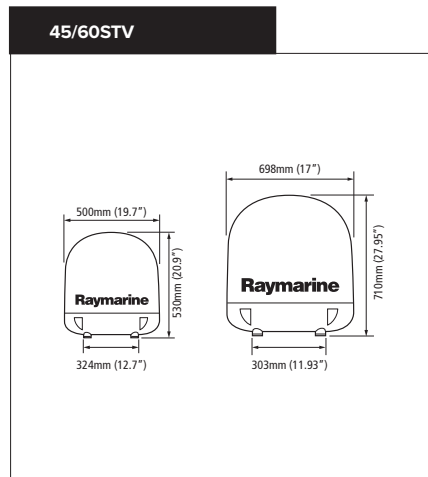
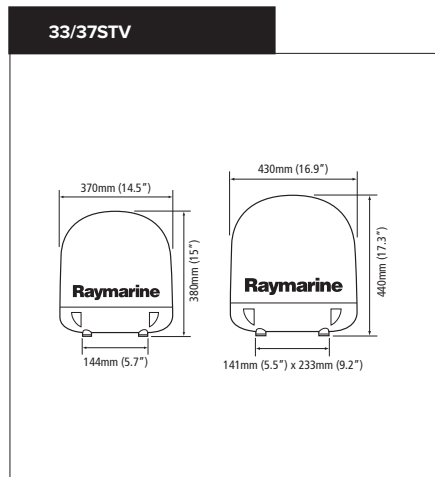
WHAT'S IN THE BOX

RAY260

- (1) Ray260 Base station
- (2) Ray260 Handset
- (3) Ray260 speaker including cable
- (4) Speaker gasket
- (5) 4x screws for base station mounting
- (6) 2x Screws for handset mounting
- (7) SeaTalk^{ng} blanking plug
- (8) 2x handset station blanking plugs
- (9) Handset extension kit
- (10) 4x Thumb nut and studs for speaker mounting
- (11) Handset mounting clip
- (12) Documentation pack
- (13) Power / Data cable 1m (3.3ft.)

SATELLITE TV

	SATELLITE TV FEATURES			
	33STV	37STV	45STV	60STV
Dual or Quad LNB design for multiple receivers	Dual	Dual	Dual/Quad	Dual/Quad
Dish diameter (cm)	13in (33cm)	14.6in (37cm)	17.7in (45cm)	23.6in (60cm)
DVB (Digital Video Broadcast) Compatible	Y	Y	Y	Y
High Definition (HD) Compatible	Y	Y	Y	Y
iQ2 Quick and Quiet Technology for fast acquisition and silent operation	Y	Y	Y	Y
Wide Range Search Algorithm for high speed search and fast satellite acquisition	Y	Y	Y	Y
Dynamic Beam Tilting (DBT) technology for enhanced signal tracking in extreme weather and sea conditions	Y	Y	Y	Y
Conical scanning detects strongest satellite signal for enhanced stabilization	Y	Y	Y	Y
GPS receiver for reduced acquisition time	Input only	Built-In	Built-In	Built-In
Antenna Elevation Range	10° to 80°	10° to 80°	10° to 90°	10° to 90°
Available Automatic LNB Skew Control	N	N	Y	Y
Extended Elevation Range with Auto Skew			0° to 90°	-15° to 90°
Ethernet and Wi-Fi Enabled for setup, control, diagnostics and updates	Y	Y	Y	Y
Service Areas Available	Americas/Asia	Worldwide	Worldwide	Worldwide
Suggested Vessel Size	20-25ft (6 - 7.6m)	25-35ft (7.6 - 10.7m)	35-50ft (10.7 - 15.2m)	over 50ft (over 15.2m)



- WHAT'S IN THE BOX**
- 33/37/45/60STV**
- (1) Antenna Unit
 - (2) Antenna Control Unit
 - (3) Installation Kit
 - (4) Cables
 - (5) Documentation