

NEW

Raymarine®

Multifunction Displays



GPS

Radar

Sonar

Thermal Imaging

Wireless

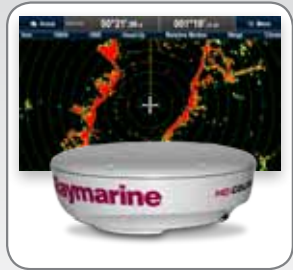
AIS

Weather

Navigation Simplified



Charts Included



HD COLOR Radar



Video



Clear Pulse Sonar



SIRIUS Marine Weather



Thermal Night Vision



7"



12.1"

Easy On Board Networking

Wireless Mobile Integration



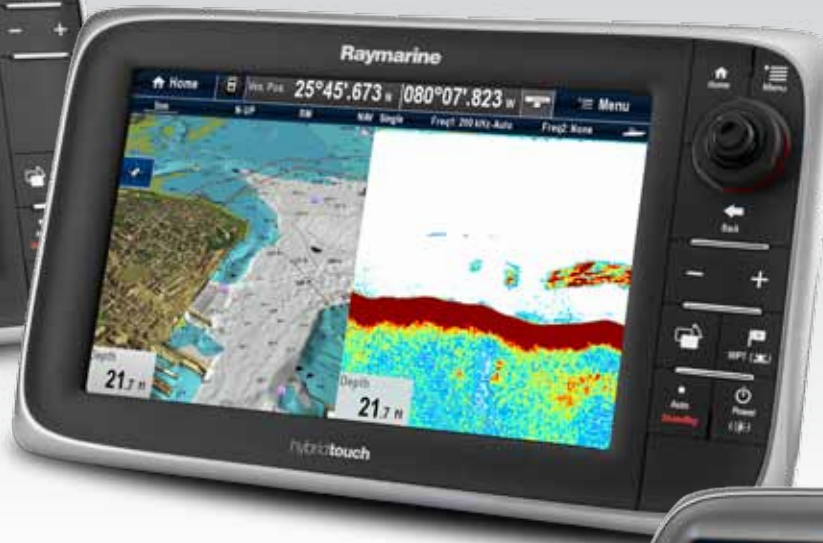
Multifunction - Charts, Sonar, Radar and more...

AIS

e-Series with HybridTouch™



12.1" e-Series



9" e-Series



7" e-Series

Harness the full power of Raymarine navigation technologies with e-Series network multifunction displays. Each e-Series display features HybridTouch™, delivering the simplicity of touch screen control and the confidence of full keypad control when seas are rough.

hybridtouch™



Become an Expert



- e-Series and c-Series MFDs are powered by Raymarine's intuitive LightHouse user interface
- LightHouse places frequently used navigation functions right at your fingertips
- Quickly become an expert at all navigation functions

Award Winning Technology

The 7" e-Series displays have impressed the marine industry with iPad® and iPhone® integration, usability and fast performance.



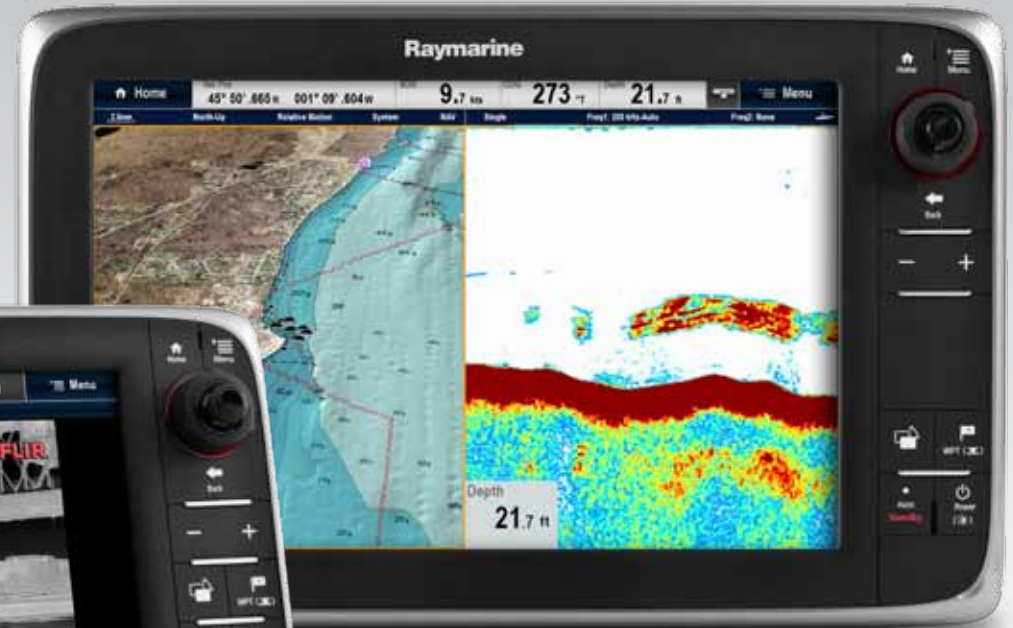
c-Series with Keypad Control

c-Series network multifunction displays (MFD) are all-in-one navigation displays for boaters that demand performance and value. Controlled by a user-friendly keypad and Raymarine's exclusive LightHouse User Interface, c-Series puts in your command of charts, sonar, radar, and even thermal night vision.

Keypad Control



9" c-Series



12.1" c-Series

Photo Courtesy of Billy Black



Easy to Upgrade Helm Station Adapters

- Making the switch from Raymarine Classic and Widescreen MFDs is easy, with our optional helm station adapters
- Install a new generation 9" or 12.1 network MFD without any cutting or expensive helm station modifications
- Helm Station Adapter Kits are available for E/C80 and E/C120 Classic and E/C90W E/C120W Widescreen multifunction displays



Built-In GPS Sensor

- High sensitivity internal GPS sensor
- 50 channels and super fast acquisition time

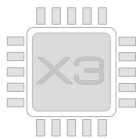


Stylish rubberized suncovers offer secure protection when the displays are not in use.



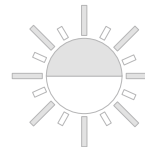
Extremely Fast -Times Three

- Dual core main processor plus a third graphics processor
- Stunning 3D graphics and instantaneous chart redraw
- Very responsive user interface



Bright and Beautiful

- Super bright, optically bonded LCD displays produce sharp colors and contrast
- Wide viewing angle and excellent sunlight visibility
- Efficient LED backlighting draws up to 40% less power than previous generation products



Big Screen - Small Footprint

Raymarine network MFDs are stylish and unobtrusive, and give boaters a big screen experience in a small footprint.



Intuitive LightHouse UI

HybridTouch

Customizable

Easy To Use



Easy View Off



Easy View On

The new Easy View mode brings chart text, spot soundings and icons into clear view on every range scale

Charts Included



All e-Series and c-Series displays are available with high quality Navionics ready-to-navigate charts on an included microSD card.



Step Up to Navionics Platinum+

Step up to Navionics Platinum+ charts and experience super fast 3D charts and aerial photo chart overlays.

Connect with Navionics Online

Download the latest chart updates with Navionics' optional Freshest Data program. You can also download user generated points of interest created by Navionics' community of mobile users.



Three Processors

Stunning 3D Graphics

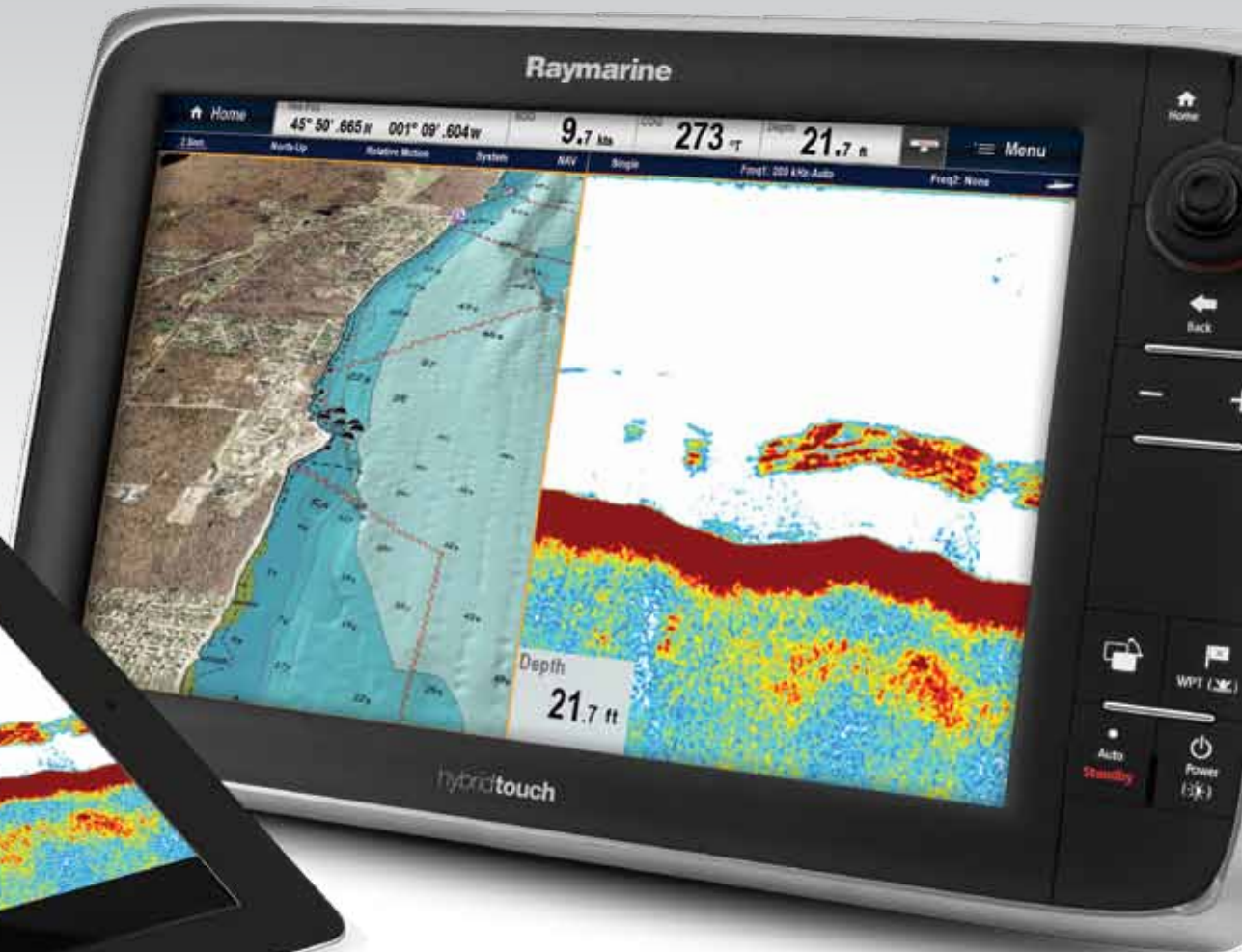
Instant Redraw

Charts Included

Go Wireless



- Transform your iPhone, iPad, smartphone or tablet into a wireless Raymarine viewer!
- View charts, sonar, radar, and thermal night vision from anywhere onboard, right in the palm of your hand
- Connecting is easy! Just go to the Apple iTunes App store and download the free Raymarine Viewer to get started



Sync with Navionics Mobile



Instantly synchronize waypoint locations, favorite fishing spots and route plans between your display and the Navionics Mobile app. Plan your next voyage right on your iPhone or iPad and then wirelessly sync your route plans using built in Wi-Fi.

Wireless Streaming to the Apple iPhone and iPad

Free Raymarine Viewer App

Built-In Wi-Fi



Control your MP3 Music from the Helm

- Built-in Bluetooth technology allows you to remotely control the music functions on your MP3 player or SmartPhone
- Simply connect your Bluetooth enabled MP3 Player or SmartPhone to the vessel's audio system
- Play and pause tracks, skip forwards and backwards in your playlist, all from the Raymarine display. It's that simple, and no complicated accessories or expensive hubs are required



Wireless Steering Wheel Control

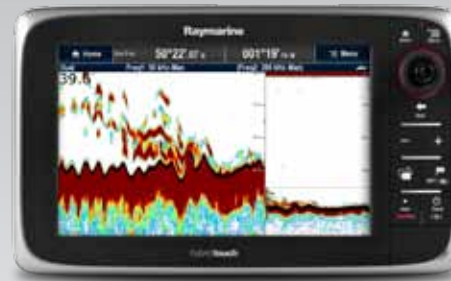
- Stay in command without letting go of the wheel. The optional RCU-3 Bluetooth remote gives you simple access to frequently used functions while underway
- Change range scales, control your music, switch between apps, and even mark a waypoints
- You can also attach the RCU-3 to the supplied lanyard and transform the RCU-3 into a convenient handheld remote control



Control Your Favorite Tunes Right From The Helm - Wirelessly

ClearPulse Digital Sonar

- For anglers looking for one machine to do it all, choose a c-Series or e-Series network MFD with a built-in dual frequency ClearPulse digital sonar
- ClearPulse Digital sonar technology targets fish and depicts structure with amazing clarity
- Intelligent ClearPulse sonar automatically adapts and adjusts for a clear image of fish and bottom contours in depths up to 3000'



Choose your transducer and connect it directly to your MFD



Transom Mount Transducer

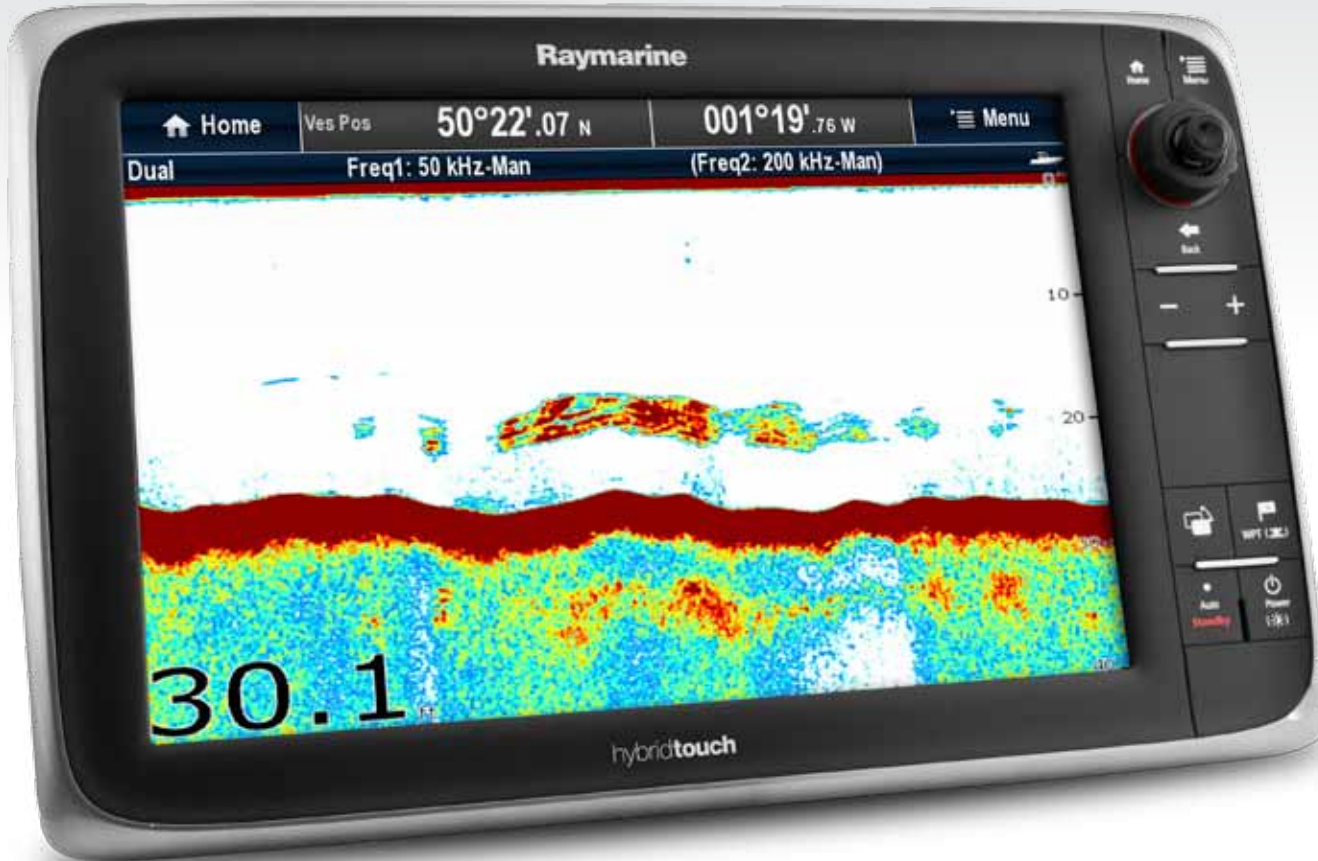


Thru-Hull Transducer



In-Hull Transducer

Choose an e-Series or c-Series MFD with a built in ClearPulse digital Sonar



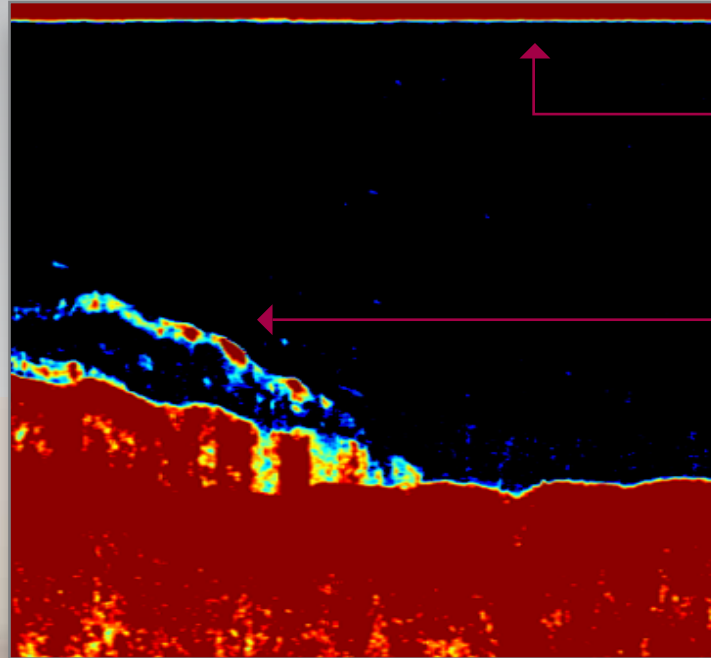
Unmatched ClearPulse™ Digital Sonar

Fully Automatic

Amazing Clarity

ClearPulse Digital Sonar

- Dual frequency operation (200/50 kHz) or 83 kHz operation for Minn Kota Universal Sonar
- Auto adaptive gain control eliminates constant adjustments
- Real-time A-Scope display, Zoom and Bottom Lock magnification modes



Eliminate Noise

ClearPulse Digital Sonar technology eliminates surface clutter and water column noise, revealing more fish.

See More Fish

ClearPulse Digital Sonar easily separates bottom dwelling fish from the ocean bottom.



Photo Courtesy of Boston Whaler Magazine

Trolling Motor Ready

Connect the e7D to optional thru-hull, in-hull, or transom transducers. Bass anglers can take advantage of Minn Kota's Universal Sonar trolling motor transducer using an optional transducer adapter cable.



See More Fish

No More Clutter



CP450C CHIRP Sonar



ClearPulse™ CHIRP - Precision Sonar

- The CP450C with ClearPulse CHIRP technology goes beyond conventional sonar and offers amazing resolution and depth performance up to 10,000'
- ClearPulse CHIRP technology takes advantage of a wide spectrum of sonar signals for a precise view of fish, structure and the entire water column

Two Independent Sonars

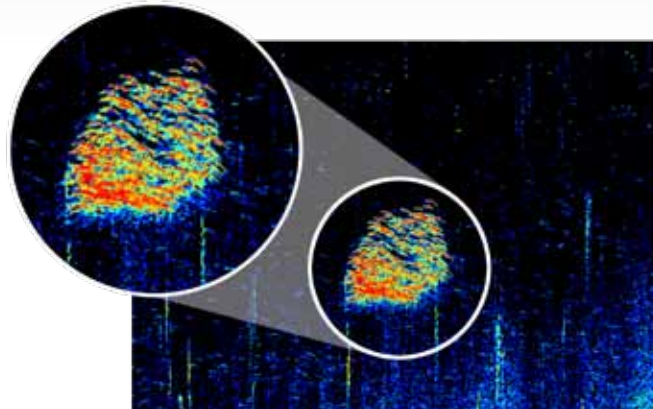
- Shallow water or offshore the CP450C "CHIRPS" in a broad range of sonar frequencies with two independent CHIRP sonar transceivers built in

Low, Mid and High Frequency Bands

- The CP450C detects fish and other underwater targets using any discreet frequency from 25 to 250 kHz. CP450C also offers mid-band frequency support in the 75 to 130 kHz range. This means no matter what they fish for, no matter where they hide, CP450C intelligently detects and targets the fish fisherman want to catch!

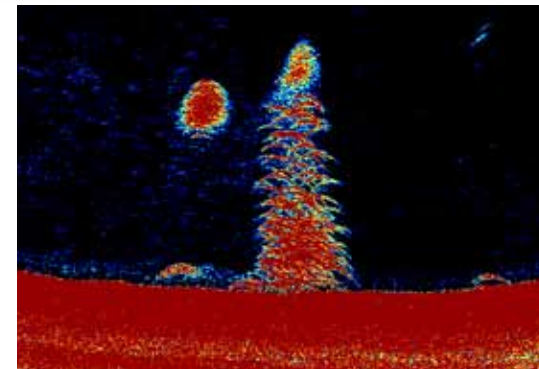
Ultra-fast

- 80 ping-per-second update rate delivers up to twice the refresh speed of conventional sonars, providing near real time view of water depth and bottom conditions when you need it most



TruZoom™

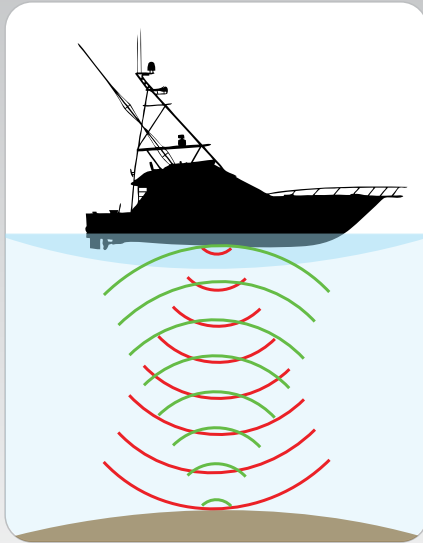
The CP450C features TruZoom™ mode for a precise magnified view of fish targets, bottom structure and baitfish without any loss of resolution seen with traditional fishfinder zoom modes.



No Compromise

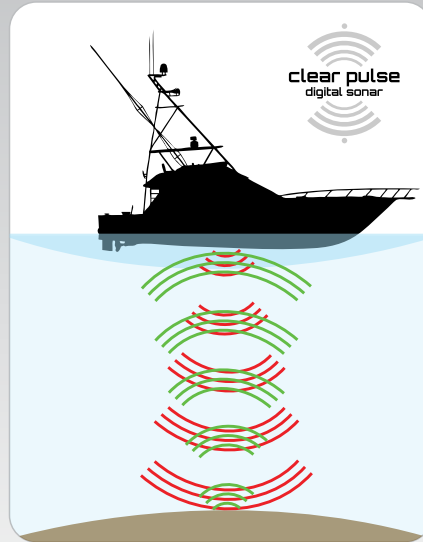
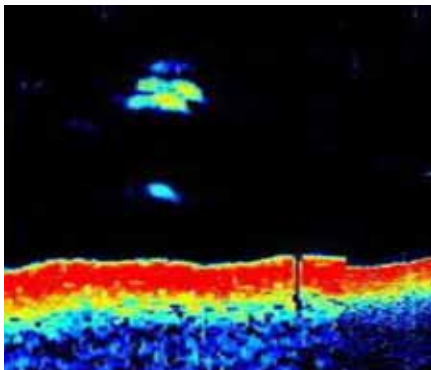
CP450C sees right through dense schools of baitfish, marking individual targets while simultaneously identifying game fish and bottom contours.

How ClearPulse CHIRP works



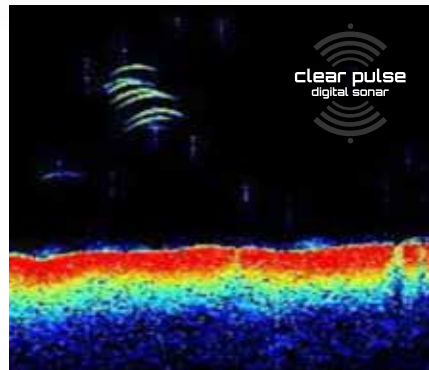
Conventional sonars transmit and listen at a single frequency with each pulse

Conventional sonar



The CP450C CHIRPS across a wide spectrum of sonar frequencies simultaneously

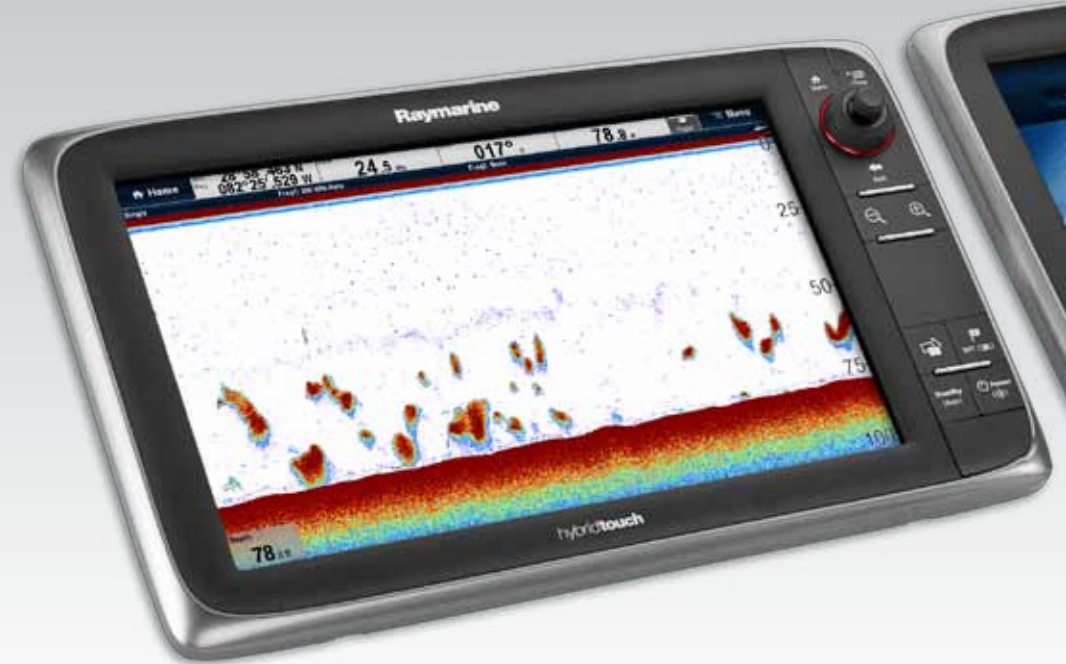
ClearPulse™ CHIRP Sonar



The CP450C's CHIRP transmission allows more sonar power to penetrate the water. **10x more power when compared to conventional echo sounders.**

Superior Resolution

ClearPulse CHIRP sonar delivers up to **10 times greater resolution** than ordinary fishfinders.



CP450C Transducers

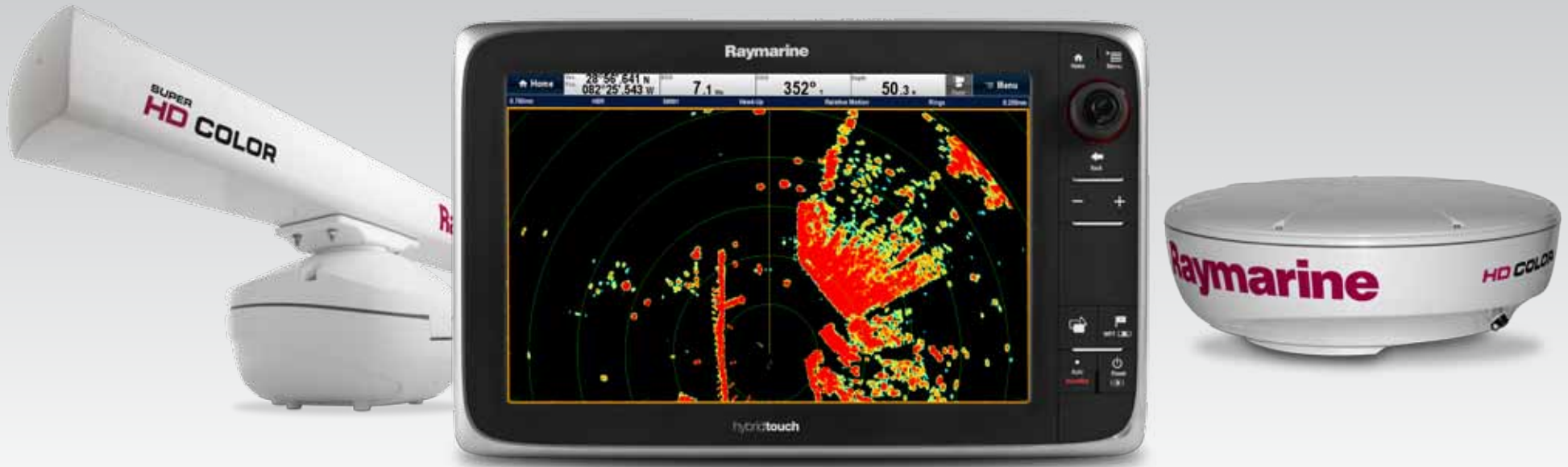
The CP450C networks with Raymarine's 3rd generation c-Series or e-Series MFDs (2012 models and beyond). Complete your CP450C with an Airmar CHIRP compatible transducer. CHIRP transducers are available for thru-hull, in hull or transom mount installations.

Wide Spectrum CHIRP Sonar

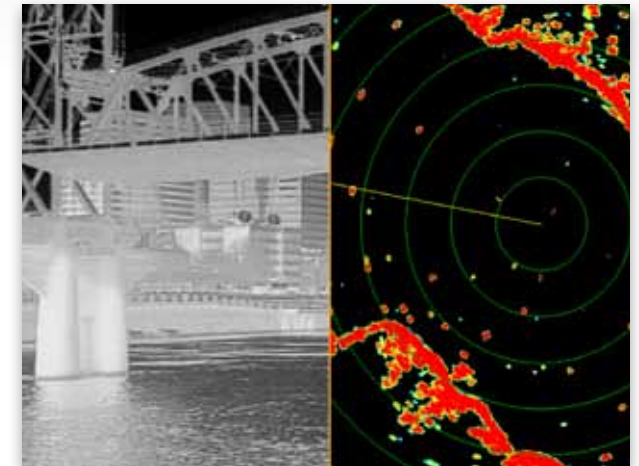
10 Times Greater Resolution

Radar

Accurate, dependable and easy to use, Raymarine Digital and HD Color radar sensors deliver unmatched performance and give you the confidence to navigate safely in limited visibility. Each Raymarine marine radar system consists of a Raymarine multifunction display, and your choice of radome or open array antenna.



Radar and Thermal



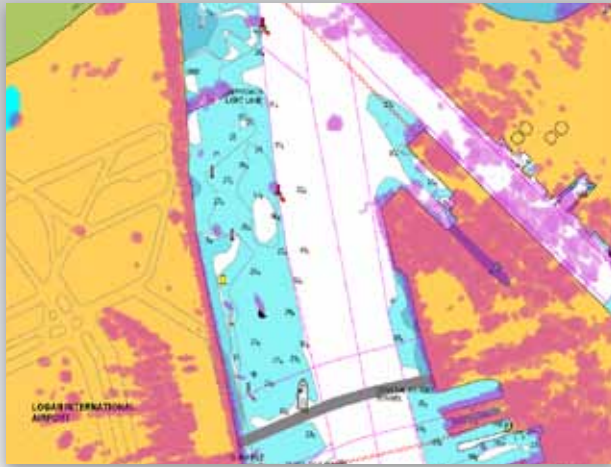
Navigate in total darkness with Raymarine radar and thermal imaging technology. Radar and thermal together make boating safer by letting you easily confirm the identity of radar targets using the thermal camera.

HD COLOR Technology

Fully Automatic

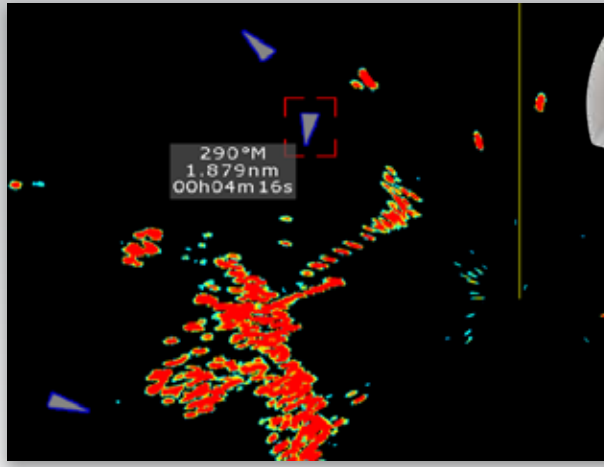
Amazing Clarity

Radar/Chart Overlay



Easily reconcile radar targets with chart objects with Radar/Chart overlay.

Marpa and AIS Target Tracking



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), and sounds dangerous/proximity alarms. Overlay AIS target info for further target clarification.

Radome or Open Array?



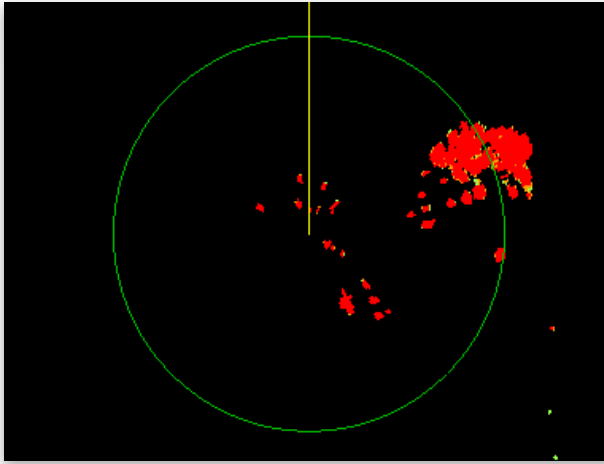
Compact and lightweight radome antennas offer excellent performance and low power consumption. Larger, open array antennas deliver better target discrimination and longer ranges.

High Speed Scanning Mode



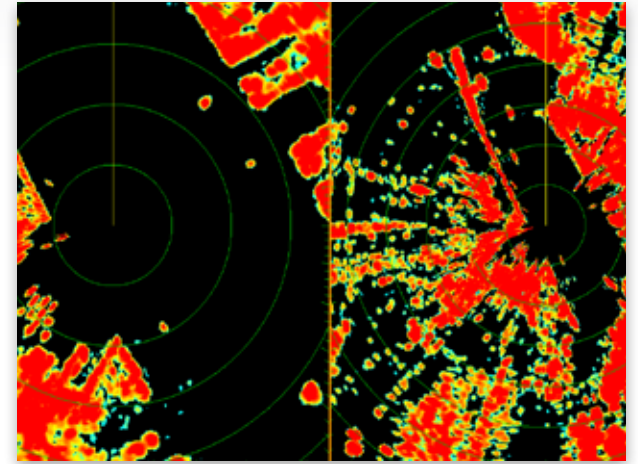
Track fast moving radar returns with the confidence of rapid screen updates using high speed 48 rpm radar scanning.

Angler's Advantage



Bird Mode automatically adjusts radar parameters for locating flocks of sea birds at distance. Now you can use radar to locate sea birds above schools of fish.

Dual Range Mode



Like having two radars in one! Keep an eye on close in targets while simultaneously viewing the "big picture" on a longer range scale.

Automatic Radar Bird Mode

Dual Range Radar

High Speed Scanning

HD COLOR Radar

256 Color Radar

256 color target levels enhance situational awareness, allowing you easily identify weaker vs. stronger radar returns.

Enhanced Dynamic Range

HD Color radar has much greater dynamic range than conventional radar. This dramatic increase in dynamic range enables the digital receiver to acquire and process vast amounts of echo information that is normally lost by conventional radar systems.

Powerful Digital Radar Processor

The powerful HD Color digital radar processor intelligently isolates and identifies true radar targets, while simultaneously eliminating unwanted sea clutter. The result is a dramatically clearer radar display.

Clear View

Each HD Color radar operates with 8 pulse widths combined with Raymarine's exclusive digital filter technology for a clear image on every range scale.

HD Color Radar Features:

- Radome or Open Array scanner options
- High performance digital receiver processor
- 256 color multi-level target display with selectable color palettes
- Bird Mode automatically optimizes the radar for detecting sea birds above schools of fish
- High Speed Mode (48 RPM) for optimal tracking of high speed targets at short ranges
- Dual-range mode, view both long and short ranges simultaneously



Digital Radomes



Compact Performance

Raymarine digital radar scanners set the benchmark for compact radar performance and value. Each radome uses Raymarine's exclusive low-noise receiver technology for excellent target detection.

Fully Automatic

Raymarine digital radar receiver technology intelligently adjusts for all conditions and delivers sharp and clear images without need for adjustment or tuning.

Easy to Install

These highly advanced digital radomes are easy to install, thanks to a small diameter inter-unit cable for both power and SeaTalk^{hs} networking.

Digital Radome Features:

- Unmatched radome performance using a combination of digital and analog signal processing
- Narrow horizontal beam widths for excellent target detection and resolution
- High power 4kW transmitters for penetrating rain and fog
- 48nm maximum range scale

SUPER HD COLOR Radar

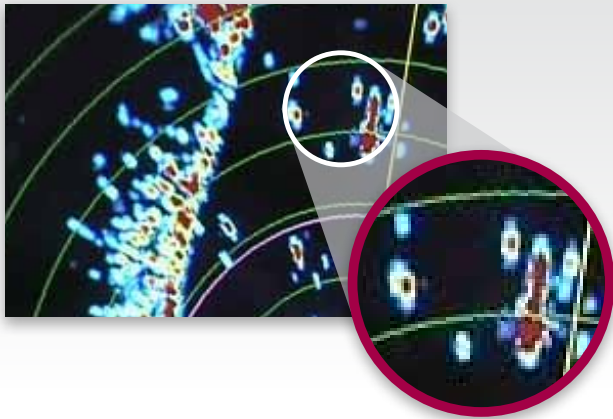
Superior Radar

More than just an evolution in radar technology, Super HD Color radar is a quantum leap into the future of marine radar. Using highly advanced digital signal processing, Super HD Color radars surpass conventional radar systems with incredibly detailed target resolution and fully automatic operation.

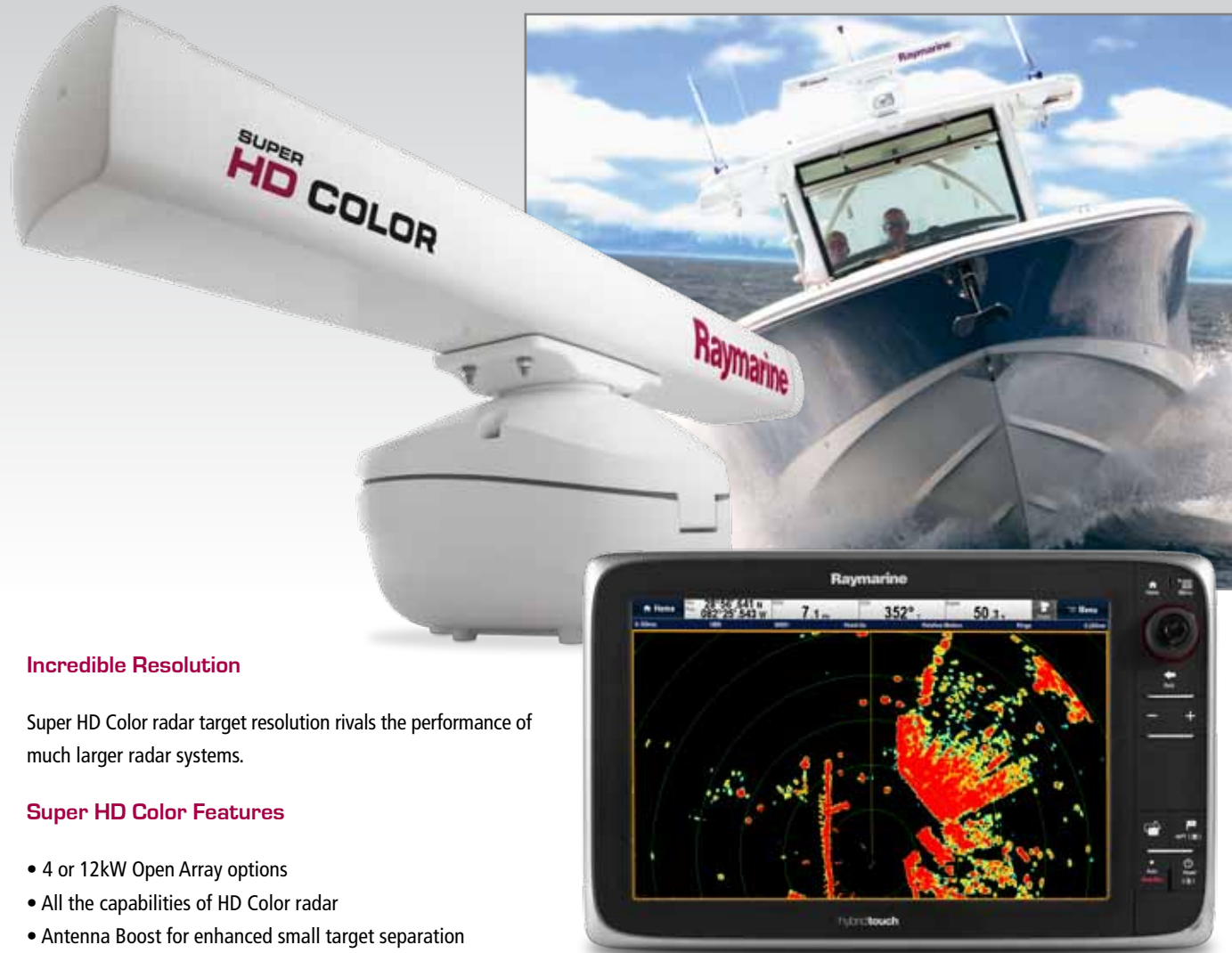
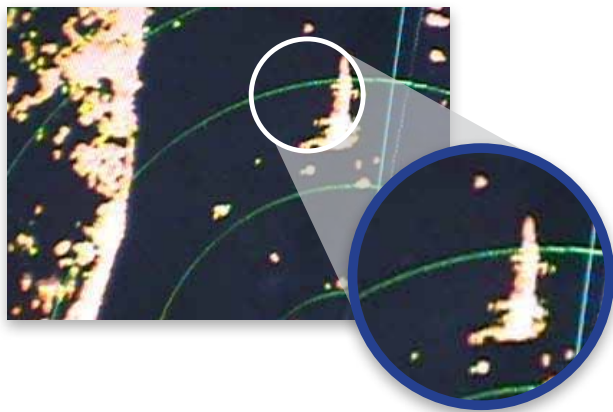
Antenna Boost

Super HD Color radar signal processing reduces the effective antenna beam width of the radar signal, delivering the performance and resolution of more powerful and larger radar arrays.

Raymarine 4kW 4' Super HD Color Radar



25kW 8.5' commercial radar



Incredible Resolution

Super HD Color radar target resolution rivals the performance of much larger radar systems.

Super HD Color Features

- 4 or 12kW Open Array options
- All the capabilities of HD Color radar
- Antenna Boost for enhanced small target separation

Lifestyle photography courtesy of Boston Whaler

256 Color Target Discrimination

Automatic Radar Bird Mode

Dual Range Radar

See in the Dark with Thermal Night Vision

Navigating at night just got easier with Raymarine T-Series thermal night vision cameras. Engineered with FLIR thermal imaging technology, T-Series cameras allow you to navigate safely and confidently—seeing obstructions, buoys, and other vessels in total darkness. Take the stress out of boating in the dark with the e-Series touch screen thermal camera controls, and access thermal images alongside radar or chartplotting applications.



hybrid**touch**™

HybridTouch controls with
e-Series Multifunction
displays

See in Total Darkness

Superior **FLIR** Thermal Imaging Technology

Thermal Night vision Technology

Everything in the world emits infrared thermal radiation, better known as heat. Raymarine thermal night vision cameras use FLIR thermal imaging technology to detect this heat and display it as a video image on e-Series and c-Series multifunction displays. By detecting the minute temperature differences across a scene, thermal imaging cameras deliver a highly detailed image of the environment, day or night, even in 100% total darkness.

Your Vision



Night Time Video Camera Image

Thermal Vision



White Hot Thermal Image

Video Integration

c-Series and e-Series MFDs are equipped with a single video input for connecting with docking, engine room or underwater cameras. The e9 and e12 series MFDs feature two video inputs ports for added flexibility.



Enhanced Situational Awareness



Easy Man Over Board Detection



Easy Docking in LowLight Situations



Various Color Options

Navigating with Thermal is as easy as watching TV

Autopilot Integration

Control Raymarine autopilots directly from the MFD. Integrated autopilot controls allow you to use your MFD as an autopilot remote.



AIS Integration

AIS (Automatic Identification System) enables the wireless exchange of navigation status between vessels and shore-side traffic monitoring centers. Add a Raymarine AIS and track AIS targets in both GPS and radar modes.



NMEA2000

Connect with NMEA2000 networks using Raymarine SeaTalk^{ng}. View engine instruments, trim tabs and wide range of NMEA compatible sensors. Easy to customize instrument displays and multiple data source selection make accessing NMEA2000 information easy.



SIRIUS Marine Weather

View up to the minute animated weather radar, forecasts, storm warnings and more. Overlay Nowrad weather radar directly on the chartplotter display. Optional SIRIUS Marine weather receiver and subscription required.



Network Components

Build a network of c-Series and e-Series display with rugged and reliable Raymarine cables and components. c-Series and e-Series displays are compatible SeaTalk^{hs} devices and utilize Raynet style waterproof connectors for added reliability. For multi display systems, choose the HS-5 5 port network switch for simple plug and play networking. Optional color coded SeaTalk^{ng} bus cables make interconnecting with Raymarine autopilots, instruments and NMEA2000 devices simple.



RS130 SeaTalk^{ng} External GPS Sensor

Self contained external GPS antenna/sensor. Ideal for below deck applications that may require an external GPS. 50 channel GPS provides fast acquisition times. SeaTalk^{ng} compatible and supplied with a SeaTalk^{ng} spur cable, as well as flush and pole mounting hardware.



Lifestyle photography courtesy of Billy Black

Specifications

Ordering Information

Technical Specifications

	Model Name	Screen Size	User Interface	ClearPulse Digital Sounder Built-In	Video Inputs	Video Out	Network Ports	With Charts Included					Without Charts
								US Coastal	US Inland	Canada	Europe	Rest-of-World	Part Number
e-Series Network Multifunction Display with HybridTouch													
	e7	7.0"	HybridTouch	No	1	No	1	T70000	T70003	T70004	T70001	T70002	E62354
	e7D	7.0"	HybridTouch	Yes	1	No	1	T70005	T70008	T70009	T70006	T70007	E62355
	e95	9.0"	HybridTouch	No	2	Yes	2	T70040	T70046	T70048	T70042	T70044	E70021
	e97	9.0"	HybridTouch	Yes	2	Yes	2	T70041	T70047	T70049	T70043	T70045	E70022
	e125	12.1"	HybridTouch	No	2	Yes	2	T70050	T70056	T70058	T70052	T70054	E70023
	e127	12.1"	HybridTouch	Yes	2	Yes	2	T70051	T70057	T70059	T70053	T70055	E70024
c-Series Network Multifunction Displays with Keypad Control													
	c95	9.0"	Keypad	No	1	No	2	T70020	T70026	T70028	T70022	T70024	E70011
	c97	9.0"	Keypad	Yes	1	No	2	T70021	T70027	T70029	T70023	T70025	E70012
	c125	12.1"	Keypad	No	1	No	2	T70030	T70036	T70038	T70032	T70034	E70013
	c127	12.1"	Keypad	Yes	1	No	2	T70031	T70037	T70039	T70033	T70035	E70014

	e7/e7D	c95/c97 e95/e97	c125/c127 e125/e127
General			
Voltage - nominal	13.8 VDC	12/24 VDC	12/24 VDC
Voltage - min/max	10.7 to 18.0 VDC	10.8 to 31.2 VDC	10.8 to 31.2 VDC
Power consumption at max brightness	13.2 Watts	16 Watts	36 Watts
Operating temp	-25°C to 55°C		
Storage temp	-30°C to 70°C		
Waterproof	IPX6 Standard		
Weight	e7 5.26 lb (2.385 Kg) e7D 5.34 lb(2.423 Kg)	e95/c95 7.8 lb (3.540 Kg) e97/c97 8lb(3.635Kg)	e125/c127 10.9 lb (4.955 Kg) e127/c127 11.2lb(5.070Kg)
Display			
Display resolution	7" WVGA (800 x 480 pixels)	9" WVGA (800 x 480 pixels)	12.1" WVGA (1280 x 800 pixels)
Backlighting	LED		
Viewing angle (left/right)	70 deg	80 deg	80 deg
Viewing angle (up/down)	50 deg	80/60 deg	80/60 deg
Network			
NMEA 0183 (2 in and 1 out)	4800/9600/38,400 baud		
SeaTalk ^{ng}	Yes		
NMEA2000	(via SeaTalk ^{ng} port) Yes		
Wi-Fi	802.11 b/g		
Bluetooth	2.1+EDR power class 1.5		
Ethernet	10/100 Mbits/s		
Video input	Composite PAL/NTSC, BNC female connector		
GPS			
GPS type	High sensitivity internal GPS		
Built In Sonar (e7D, c97,e97,c127 and e127 only)			
Type	ClearPulse™ Digital		
Operating frequencies	50/83/200 KHz		
Depth Range	Up to 3000' depending on transducer type		
ClearPulse™ CHIRP Compatible	Yes with optional CP450C		

Ordering Information

HD and Super HD Color Open Arrays	
RA1048SHD 4kW 48" Super HD Digital Open Array with 15m cable	T52085
RA1072SHD 4kW 72" Super HD Digital Open Array with 15m cable	T52087
RA3048SHD 12kW, 48" Super HD Digital Open Array with 15m cable	T52086
RA3072SHD 12kW, 72" Super HD Digital Open Array with 15m cable	T52088
RA1048HD 4kW 48" HD Digital Open Array with 15m cable	T52071
RA1072HD 4kW, 72" HD Digital Open Array with 15m cable	T52074
RA3048HD 4kW 48" HD Digital Open Array with 15m cable	T92168
RA3072HD 4kW, 72" HD Digital Open Array with 15m cable	T92169
Digital and HD Color Radomes	
RD418HD 4kW digital radome only	E92142
RD424HD 4kW digital radome only	E92143
RD418D 4kW digital radome only	E92130
RD424D 4kW digital radome only	E92132
Network Components	
HS-5 5 port network switch with Raynet connectors	A80007
2 meter network cable with RayNet connectors	A62361
5 meter network cable with RayNet connectors	A80005
10 meter network cable with RayNet connectors	A62362
20 meter network cable with RayNet connectors	A80006
1 meter RayNet to RJ45M adapter cable	A62360
RJ45 crossover coupler (use with A62360)	E55060
RayNet cable puller - 5 pk. For easy routing of Raynet cables	R70014
GPS	
Raystar 130 GPS	E32153
CP450C CHIRP Sonar	
CP450C ClearPulse CHIRP Sonar Module	E102143
CP450C Transducer Y cable	A102146
CP450C 3M transducer extension cable	A102148
CP450C 5M transducer extension cable	A102150
Convertor cable using DSM300 transducer with the CP450C (non CHIRP mode)	A102147

c-Series and e-Series Dimensions

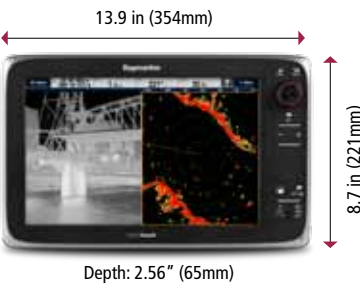
e7/e7D



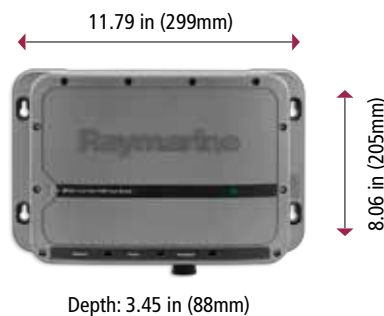
e95/e97, c95/c97



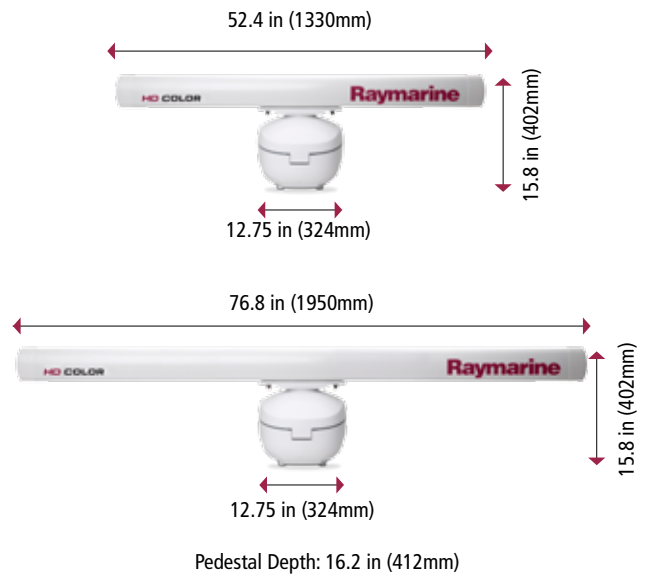
e125/e127, c125/c127



CP450C Dimensions



HD & Super HD Color Arrays Dimensions



Digital & HD Color Radomes Dimensions

