

HD Colour and Super HD Colour Open Array Radar Systems

Raymarine HD Color and Super HD Color Open Array Radar

Enhanced Performance

Raymarine Legacy Product

Raymarine HD Color and Super HD Color Open Array Scanners are now retired and the following information is for reference purposes only.

Find out more about the new Magnum Open Array Radar here ([../marine-radar/magnum.html](#))

Choose a Raymarine HD Color or Super HD Color open array scanner for enhanced performance and range. These large scanners, equipped with a more efficient antenna (increased gain) and narrow beam widths, deliver substantial improvements in range and bearing resolution giving great performance and clear target separation.

Available with ~4'4" (1.31m) or ~6'4" (1.92m) antenna beams.

Raymarine HD & Super HD Color Open Array Radar

Cut the Clutter!

Truly revolutionary, Raymarine HD Color technology improves target detection by eliminating virtually all noise and extracting more information from the radar echo return than has ever been generally available to the leisure navigator before.

Super HD Color adds another level of digital signal processing to further enhance the performance and improve the resolution. Stunning multi-level color target displays provide extra clarity and detail.



Key Features:

- **HD Color technology** delivers superior processing and target detection
- **Multi-level color** target displays
- **Adaptive auto settings**
- **Coastal, Harbour, Offshore and Buoy Auto modes**
- **SeaTalk^{HS} network compatible**
- **New, thin radar interconnect assembly**
- **Simple install**, no need to open pedestal (external waterproof connector)
- **10.8 to 32V DC operation** with supplied external voltage converter
- **Field upgradeable software** via Flash card
- **HD Color Radar technology maximizes digital radar receiver performance**, enabling 4kW Raymarine radars to deliver target detection that rivals much larger and more powerful analogue radar systems
- **Raymarine HD Color technology improves target detection** by 100% digital signal precessing and information extraction
- **HD Color and Super HD Color radar technology** delivers substantial improvements in range and bearing resolution

Radar Benefits

Where am I relative to my surroundings? Is there anything nearby that could be a danger to me, or vice versa? Radar is a great aid to navigation that allows you to:

Track Targets

Not everything uses 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), dangerous/ proximity alarms, overlay AIS info for further target clarification.

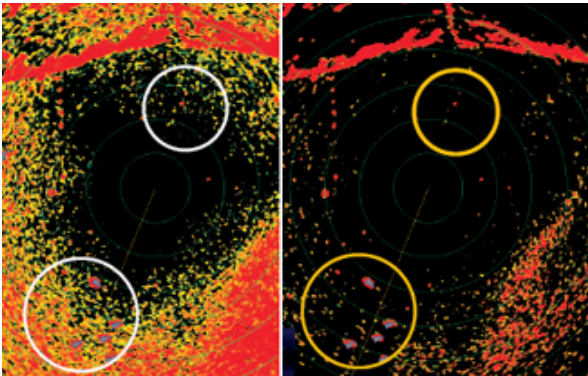
Image shows a tracked target in the previously set guard zone around your vessel and has triggered the dangerous target alarm, seen on screen, and set off an audible alarm.




Weather Advantage


Raymarine HD Color scanners provide superior all weather performance allowing you to still see targets through rain and thunderstorms. Use radar to track weather too.

Image shows an abnormally heavy rain storm, rain mode (right hand screen) was used to cut the clutter to clearly reveal the targets.



HD & Super HD Digital Open Array Radar Specifications

				
	RAYMARINE RADAR SCANNERS			
	HD COLOR SCANNERS			
Model Part Number	RA1048HD T70170	RA1072HD T70171	RA3048HD T70174	F 1
Scanner Power and Type	4kW HD Color		12kW HD Colo	
Antenna Size	~4ft 4in (1.31m)	~6ft 4in (1.92m)	~4ft 4in (1.31m)	~ (
Max Range Scale	72nm			
Scanner Weight (Pedestal + Antenna)	57.3.4lbs (26kg)	63.9lbs 29kg	57.3.4lbs (26kg)	6 2
Beam Width Horizontal (Nominal)	1.85°	1.15°	1.85°	1
Effective Horizontal Beam Width (after Super HD Processing)	N/A			
Beam Width Vertical -3dB	25°			
Antenna Side Lobes (Inside 10°)	< -21dB			

		
	RAYMARINE RADAR SCANNERS	
	HD COLOR SCANNERS	
Antenna Side Lobes (Outside 10°)	< -30dB	
Rotation Rate	24 rpm	
Receiver Bandwidth	Matched digital filter for each pulse length	
Pulse Length/PRF Settings	8	
Voltage	10.8 to 32 volts DC (using supplied VCM1)	
Power Consumption (Typical)	<70W (transmit) <30W (standby) <1.2W (sleep)	<110W (transmit) <30W (standby) <1.2W (sleep)
Number of Displayed Video Levels	256 (8-bit)	
Operating Temperature Range	14°F to 131°F (-10°C to +55°C) D6	
Non-Operating Temperature Range	-20°C to +70°C C6	
Waterproofing Standard	IPX6	
Scanner Cable Length	15 m standard (5m 10 m and 25 m optional)	

Raymarine HD & Super HD Color Open Array Radar Manuals