



HD AND SUPER HD DIGITAL SCANNERS = UNRIVALLED PERFORMANCE

Raymarine's new Super HD Digital and HD Digital radar technology - not just a step but a true leap into the future.

The HD Digital secret is Digital Signal Processing, delivering the performance and target recovery in a Super HD Digital 4kW package to rival that produced in a conventional analogue 12kW radar and in a 12kW package, that of a conventional 25kW radar.

Not only have our R&D teams leapt a technological barrier in target detection, the fruits of their labour mean that this superior performance can be enjoyed using only a quarter, or even less, of the power consumption that a conventional 25kW radar would demand.

Truly revolutionary, Raymarine HD Digital technology improves target detection by 100% Digital Signal Processing compared to analogue processing in other radars, extracting more information from the radar echo return than has ever been generally available to the leisure navigator before. Super HD Digital adds another level of Digital Signal Processing to further enhance the performance and improve the resolution. Stunning multi-level 256 colour target displays provide extra clarity and detail; for example, stronger targets show as different colours so that ships that could be lost in rain clutter now stand out in a completely different colour.

A perfect match for the G Series navigation system, these new open arrays will also fit an E Series system and the new C Series Widescreen displays for the very latest in radar technology – HD and Super HD Digital.

HD and Super HD Digital Features

- Real time dual-range radar.
- HD Digital technology delivers superior processing and target detection.
- Multi-level colour target display.
- Adaptive auto settings.
- Coastal, Harbour, Offshore and Buoy auto modes.
- SeaTalk^{hs} network compatible.
- New, thin radar interconnect assembly – quicker installation.
- Simple install, no need to open pedestal (external waterproof connector).
- 10.8 to 32V DC operation with supplied external voltage converter.
- Field upgradable software via Compact Flash card in GPM400, E Series or C Series Widescreen.

- HD Digital Radar technology maximizes digital radar receiver performance, enabling 4kW Raymarine HD Digital radars to deliver target detection that rival much larger and more powerful analogue radar systems.
- Raymarine HD Digital technology improves target detection by using 100% Digital Signal Processing and information extraction.
- HD Digital and Super HD Digital radar technology delivers substantial improvements in range and bearing resolution.

Note: Actual maximum radar range will vary depending on scanner and target height. Visit www.raymarine.co.uk to learn more about maximum radar ranges.





Raymarine's scanners deliver unparalleled performance. The compact 4kW radomes provide range scales of 24nm (18") and 48nm (24") while the high performance open arrays offer 72nm maximum range and improved target resolution*.

Open array or radome?

Choose a **radome** when mounting space is limited or restricted by rigging.

Radomes are ideal for sailboats and powerboats and provide exceptional performance even in the most challenging conditions.

Choose an **open array** scanner for enhanced performance and range. These larger scanners are equipped with a more efficient antenna (increased gain) and narrow beam widths for improved performance and target separation. HD Digital and Super HD Digital radar technology and open array scanners deliver substantial improvements in range and bearing resolution.

Open array scanners are ideal for powerboats, commercial vessels and larger sailing vessels that demand maximum performance.

Radomes


- Choice of 2kW (18") or 4kW (24") models.
- Improved radiation pattern and bearing resolution using Propagation Enhancing Geometry.
- Improved sensitivity, signal to noise ratio and lower overall receive noise.
- Greatly reduced sea clutter.
- Improved target separation and clarity at short ranges.
- Increased target visibility at long ranges.
- Lightweight and compact.
- Ideal when space is at a premium.
- Minimal power consumption.
- Plug and play with C and E Series multifunction displays.



New

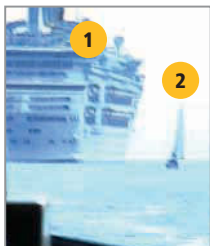
Digital Radomes

- Choice of powerful 4kW 18" or 24" models.
- Narrow beam width for enhanced target resolution (4.9° 18" Radome and 3.9° for 24" Radome).
- Compatible with C Series Widescreen, E Series and G Series. Not compatible with C Series.
- SeaTalk^{hs} connectivity.
- Superior sensitivity and weak target detection.
- Optimised performance over complete range scale relative to range discrimination and target detection.

 page 95 for product specifications

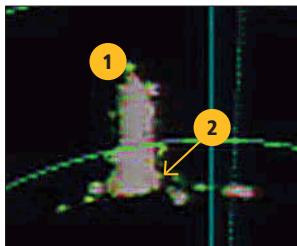
Real World Image

Ocean liner and yacht leaving harbour.



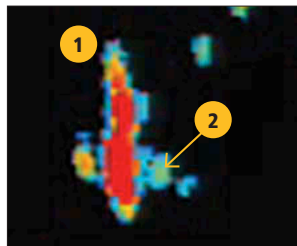
Standard Commercial Radar

Standard commercial 25 kW radar. Yacht (2) echo merges with ocean liner (1) echo.



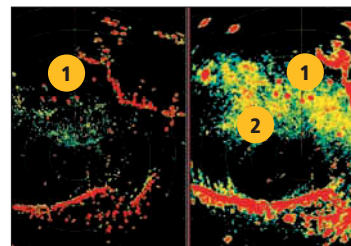
HD Digital Radar Image

Raymarine HD Digital 4 kW radar Yacht (2) is clearly visible as a green echo next to the liner (1).



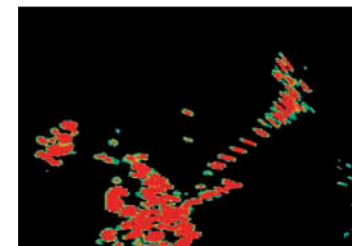
HD Digital All Weather Performance

Raymarine Super HD and HD Digital radar provide superior all weather performance. Targets (1) still visible through rain (2).



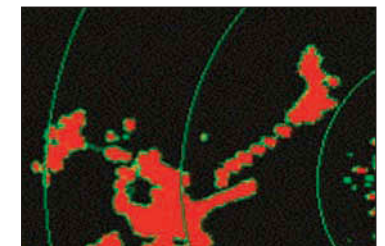
Super HD Digital 4kW radar Image

Raymarine Super HD accurately identifies small targets.

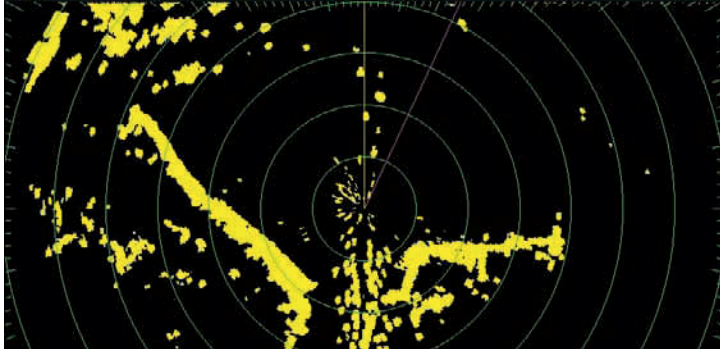


Analogue 12kW radar Image

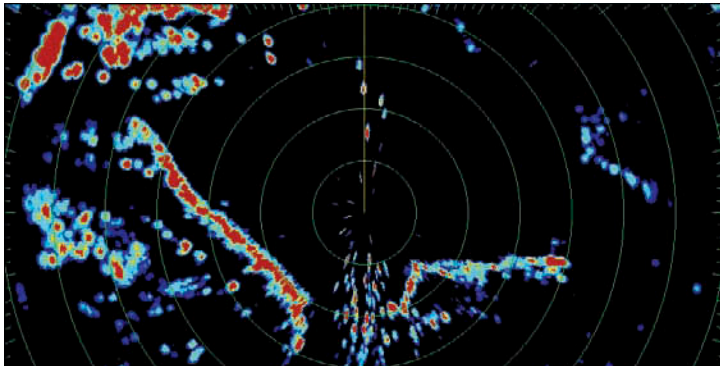
Analogue radar offers less detailed images.



Classic Radar image



HD DIGITAL

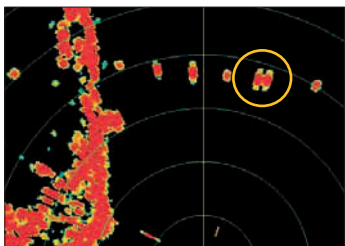


HD Digital radar extracts more information. Targets that merge with standard radar displays can be identified more clearly with HD Digital. For example, vessels at low tide close to mud banks would merge with standard radar, whereas HD Digital can separate them for a clearer picture – targets with different frequencies are ‘tagged’ with different colour for clarity.

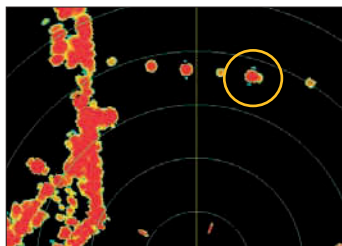
Super HD Digital Radar compared to HD Digital

Super HD reveals even more detail than HD Digital. The Super HD image shows that there are actually two targets in the ringed area, whereas the same targets on HD image appear as one.

Super HD Digital



HD Digital



18" 2kW AND 24" 4kW RADOMES



RADOME PRODUCT FEATURES	18"	24"
Power – kW (kilowatts)	2	4
Maximum range scale – nautical miles (nm)	24	48
Weight – lb (kg)	19.9 (9)	22.1 (10)

18" AND 24" 4kW DIGITAL RADOMES



RADOME PRODUCT FEATURES	18"	24"
Power – kW (kilowatts)	4	4
Maximum range scale – nautical miles (nm)	48	48
Weight – lb (kg)	21 (9.5)	22.1 (10)

48" AND 72" 4kW HD DIGITAL OPEN ARRAYS



4 kW OPEN ARRAY PRODUCT FEATURES	48"	72"
Power – kW (kilowatts)	4	4
Maximum range scale – nautical miles (nm)	72	72
Weight – lb (kg)	57.2 (26)	63.8 (29)

48" AND 72" 4kW AND 12kW SUPER HD DIGITAL OPEN ARRAYS



4 AND 12 kW OPEN ARRAY PRODUCT FEATURES	48"	72"
Power – kW (kilowatts)	4 or 12	4 or 12
Maximum range scale – nautical miles (nm)	72	72
Pedestal weight – lb (kg)	57.2 (26)	63.8 (29)

RAYSTAR 125 COMPACT SATELLITE DIFFERENTIAL GPS ANTENNA

Compact and accurate the Raystar125 Satellite Differential GPS receiver provides pinpoint accuracy to Raymarine's C Series and E Series multifunction displays. The Raystar125 outputs either SeaTalk or NMEA 0183 and is fully compatible with Raymarine SeaTalk instruments and autopilots.

A self contained waterproof GPS receiver and antenna combined, the Raystar125 delivers accuracy to less than 3 metres by decoding GPS correction signals.

