

Raymarine®

DIGITAL RADAR

HD & Super HD
Digital Radar



RADAR SCANNERS FOR



E | SERIES



G | SERIES

HD DIGITAL™ RADAR

Raymarine's HD Digital technology brings radar users the power of digital signal processing with a truly adaptive transmitter and receiver that automatically adjusts to changing environmental and sea conditions. HD Digital radar delivers a dramatically clearer radar picture with crisp, well-defined contact echoes and life-like target presentation. HD Digital radar's high-speed digital processing detects weak and distant contacts automatically, while virtually eliminating clutter and noise.

HD DIGITAL FEATURES:

- Adaptive digital receiver automatically adjusts to changing environmental and sea conditions for a dramatically clearer picture
- Fast digital receiver processor
- 265 color multi-level display with selectable color palettes.
- Automatic harbor, coastal, offshore and buoy operating modes
- Dual-range mode allows you to monitor both long and short ranges simultaneously with only one scanner and one display
- Thin interconnect cable and remotely mounted voltage converter module



SUPER HD DIGITAL™ RADAR

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

Super HD Digital 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 analog radar systems. Super HD Digital technology then uses a powerful processor to intelligently isolate and identify true radar targets, while simultaneously eliminating unwanted sea clutter. The result is a dramatically clearer radar display.



DUAL RANGE MODE

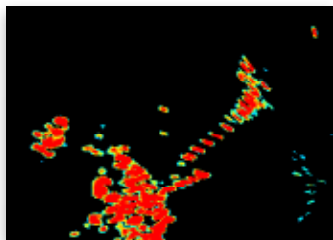
SUPER HD DIGITAL FEATURES

All the features of HD Digital Radar plus:

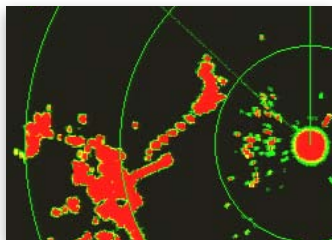
- Twice the performance of conventional radar systems of the same power and size
- Advanced Super HD Digital signal processing reduces the effective antenna beam width, enabling increased resolution and performance

TARGET SEPARATION: PIER & PILES

Raymarine Super HD Digital, 4kW, 4'



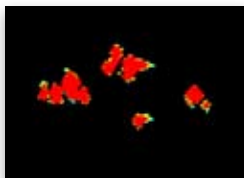
12kw, 6' Analog Radar System



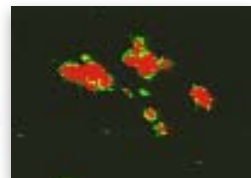
Raymarine Super HD Digital accurately identifies small targets. Range: 3/4 (.75) NM Scale

MAP-LIKE CLARITY: ISLES OF SHOALS

Raymarine Super HD Digital, 4kW, 4'



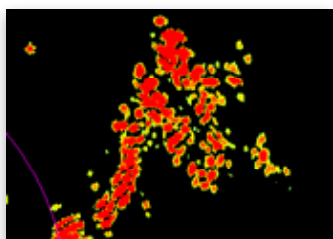
12kw, 6' Analog Radar System



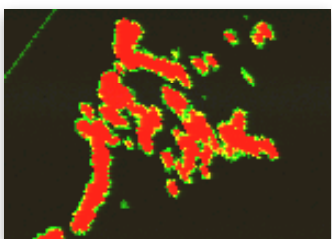
Target Separation on longer range scales (6 NM) is greatly improved

COASTLINE DETAIL: SUPER HD DIGITAL VS. ANALOG

Raymarine Super HD Digital, 4kW, 4'



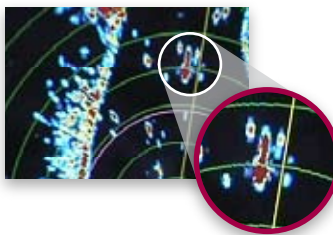
12kw, 6' Analog Radar System



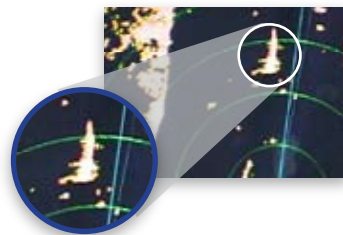
Super HD accurately depicts the shoreline. Range: 3 NM Scale

25KW RADAR COMPARISON

Raymarine 4kW 4' Super HD Digital Radar



25kW 8.5' commercial radar



Target Separation on longer range scales (6 NM) is greatly improved



HD and Super HD Digital radars are compatible with G-Series Navigation systems and E-Series multifunction displays (Requires E-Series version 4 software or higher)

SUPER HD DIGITAL OPEN ARRAY SPECIFICATIONS

POWER	4kW, 48" Super HD Digital Open Array 4kW, 72" Super HD Digital Open Array	12kW, 48" Super HD Digital Open Array 12kW, 72" Super HD Digital Open Array
Nominal Voltage (volts DC)	12v, and 24v, systems	12v and 24v systems
Absolute voltage range	10.8-32v DC	10.8-32v DC
ENVIRONMENTAL		
Temperature range	-10°C to +55°C Operating -20°C to +70°C Non-operating	-10°C to +55°C Operating -20°C to +70°C Non-operating
Humidity	Up to 95%	Up to 95%
Waterproofing standard	IPX6	IPX6
Product Weight lbs(kg)	48": 56.4 lbs (25.6 kg) 72": 63.9 lbs (29 kg)	48": 56.4 lbs (25.6 kg) 72": 63.9 lbs (29 kg)
SCANNER FEATURES		
Receiver Type	Super HD Digital	Super HD Digital
Maximum range scale	72nm	72nm
Transmitter frequency	9420 +/- 20 MHz	9420 +/- 20 MHz
Peak power output	4kW	12kW
Pulse length/PRF	8 (auto target/expand)	8 (auto target/expand)
Horizontal beam width -3 dB	Adjustable to < 1°	Adjustable to < 1°
Vertical beam width -3dB	25°	25°
Rotation rate	24 rpm	24 rpm

HD DIGITAL OPEN ARRAY SPECIFICATIONS

POWER	4kW, 48" Digital Open Array	4kW, 72" Digital Open Array
Nominal Voltage (volts DC)	12v, and 24v systems	12v, and 24v systems
Absolute voltage range	10.7-32v DC	10.7-32v DC
ENVIRONMENTAL		
Temperature range	-10°C to +55°C Operating -20°C to +70°C Non-operating	-10°C to +55°C Operating -20°C to +70°C Non-operating
Humidity	Up to 95%	Up to 95%
Waterproofing standard	IPX6	IPX6
Product Weight lbs(kg)	48": 56.4 lbs (25.6 kg)	72": 63.9 lbs (29 kg)
SCANNER FEATURES		
Receiver Type	HD Digital	HD Digital
Maximum range scale	72nm	72nm
Transmitter frequency	9405 +/- 20 MHz	9405 +/- 20 MHz
Peak power output	4kW	4kW
Pulse length/PRF	8 (auto target/expand)	8 (auto target/expand)
Horizontal beam width -3 dB	1.9°	1.15°
Vertical beam width -3dB	25°	25°
Rotation rate	24 rpm	24 rpm

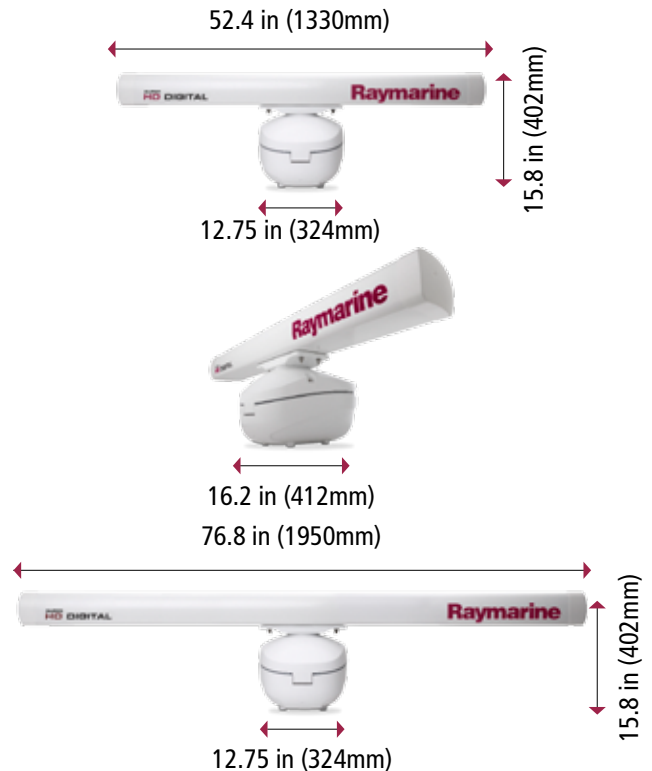
SUPER HD DIGITAL ORDERING INFORMATION

PART #	DESCRIPTION
T52085	RA1048SHD 4kW 48" Super HD Digital Open Array with 15m cable
T52087	RA1072SHD 4kW 72" Super HD Digital Open Array with 15m cable
T52086	RA3048SHD 12kW, 48" Super HD Digital Open Array with 15m cable
T52088	RA3072SHD 12kW, 72" Super HD Digital Open Array with 15m cable

HD DIGITAL ORDERING INFORMATION

PART #	DESCRIPTION
T52071	RA1048HD 4kW 48" HD Digital Open Array with 15m cable
T52074	RA1072HD 4kW, 72" HD Digital Open Array with 15m cable

DIMENSIONS



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Additional information, specifications and interactive product tours available online at www.raymarine.com



Product specifications subject to change without notice