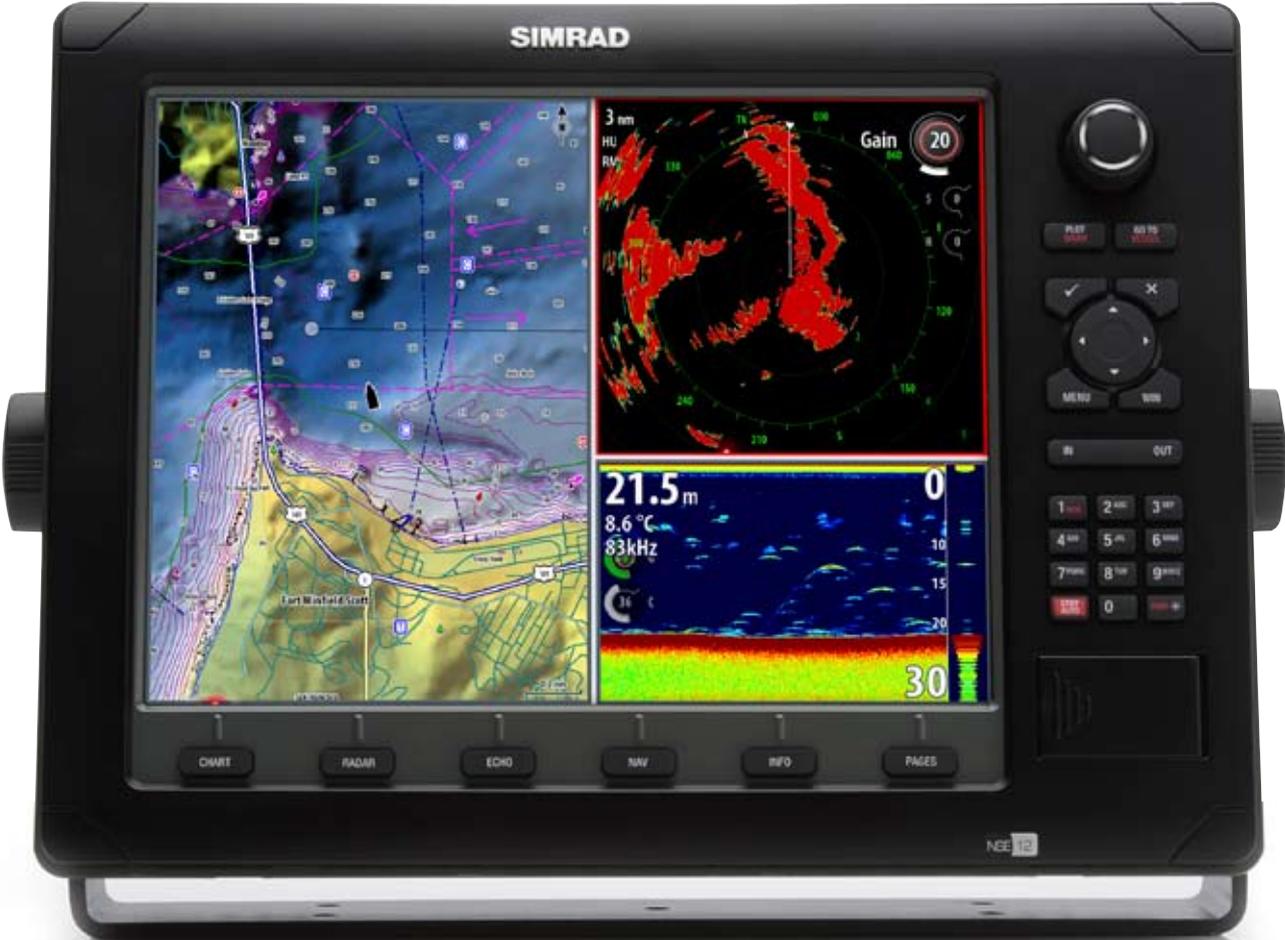


**SIMRAD**

# Brilliant.





## Innovation and quality united.

Introducing Simrad NSE a stunning all new generation of navigation systems. NSE evolves from two of the finest brands in the marine electronics industry and offers the ultimate user experience. Elegant yet brutally strong, NSE combines flexibility with the classic reliability our experienced typical users demand in a multi-function display.

Simrad has long been recognized as a leader in professional marine markets, specifically for the innovative and quality autopilot systems that are used by the best in the industry.

Internationally renowned electronics manufacturer Northstar has a strong heritage in producing high-performance navigation solutions. The formation of Navico allowed revolutionary technologies derived from both Simrad and Northstar to be combined, delivering the best in class, in every class – best radar, best echosounder, best chartplotter, best advanced user interface...



**SIMRAD**



# Simrad NSE

**Best in class. In every class.**

## ▶ **Lightning Fast, Fully Loaded Chartplotter**

- The high power processing of NSE lets you zoom, pan and navigate with virtually zero chart lag time.
- Navigate right out of the box. NSE comes preloaded with large scale, premium navigation charts
- All the features with 2D, 3D and shaded relief capability presentation modes
- All New Simrad High Performance GS15 GPS 5hz Antenna with NMEA2000/SimNet connections.

## ▶ **Award Winning Echosounder and Radar Technology**

- BSM-1 Broadband Sonar for Excellent target separation and deep water penetration
- BR24 Broadband Radar & HD Digital Domes and Arrays for superior image clarity and definition

## ▶ **New Simrad NSE Control Interface for Easy Operation**

- Rotary Controller, Cursor Pad, and an Alphanumeric Keypad for flexible & solid input control
- QuickTouch for quick and easy page access and recall
- Minimal time required to learn operation with on-screen menus and prompts

## ▶ **Elegant Design, Brutally Strong Simrad Construction.**

- Classic Simrad design with flush mount option compliments any helm design
- Substantial aluminium housing, waterproof connections, and a robust bracket mount all designed for harsh environments

## ▶ **Complete Flexibility – with “Masterless” Networking**

- Share Charting, Echosounder and Radar information across multiple units
- “Masterless” system - Any networked unit can operate independently
- SimNet plug and play data networking for NMEA2000 compatible sensors & Instrumentation
- Video input and output for display of video or navigation data where you want it

## ▶ **Brilliant, Low Power LED Display Technology**

- A “no compromise”, brightest in class SunView™ LED Display
- NSE12 is industry first 12” MFD with high resolution XGA display
- Large readable fonts for clear visibility

# Pushing all the right buttons.

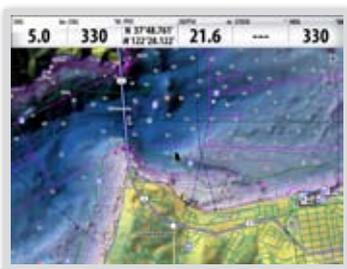


## QuickTouch keys

- Touch a button and make things happen...
- Immediately access Chart, Radar and Echo Sounder
- Add up to 4 custom pages for every QuickTouch key
- Customize page setups for split screen views
- QuickTouch keys automatically recall the last page viewed



## CHART



## Chart

Instantly orient yourself to your surroundings. Simrad NSE comes with premium embedded charts that allow for out of the box navigation for both novice and experienced mariners.

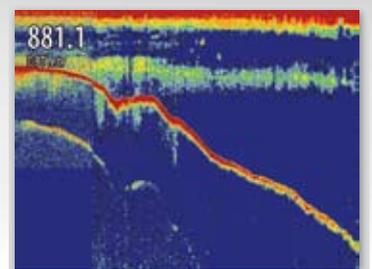
## RADAR



## Radar

Radar improves a mariner's situational awareness. Easy to operate Radar function allows for Navigation, Target Tracking and collision avoidance. Display both MARPA and AIS targets for the complete picture

## ECHO



## Echo

NSE utilizes high performance Broadband Sounder™ technology to penetrate deepwater, clearly define underwater structure and “whisper” into the water to find more fish.



▶ **Rotary controller:**

- Perfectly intuitive for fine or course control of gain, zoom and menu
- Easy push to enter functionality



▶ **Alphanumeric keypad**

- The quickest and most accurate method to enter waypoint, route and track information

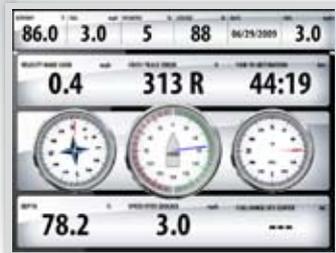
**NAV**



**Nav**

Emphasis is on "clear and easy to read". The position and steer screen offer concise information displayed in large fonts and simple graphics.

**INFO**



**Info**

Pre-configured gauge displays show vessel, environmental and navigation information in digital, analogue or bar format. Optional video inputs complete your NSE system.

**PAGES**



**Pages**

The Pages utility is Command Central for frequently used options and tools. Display and edit waypoints, routes and tracks as well as saved log files. AIS, Alarms and GPS status pages are easily accessed.

# Plug-in to best in class performance.

Innovative high performance plug and play modules combine to make Simrad NSE Best in class, in every class.

## CHART | INSIGHT HD OR NAVIONICS® PLATINUM



▲ Insight HD showing 3D shaded relief



▲ Navionics Platinum with satellite photo overlay

### CHART Premium Charts

#### ▶ Insight HD Embedded

- Nautic Insight™ offers a superior like-like view of coastal bottom structure with detailed coastal and offshore depth contours, plus nav aids, for the entire U.S. coastline.
- Switch from traditional paper-like charts to amazing top down, 3D shaded relief that lends life-like perspectives to bottom structure as well as topography.

#### ▶ Navionics Platinum or Navionics Platinum Plus™ Compatible

- Award-winning Platinum Charts include seamless chart detail, satellite photos and 3D.
- View depths and elevations in 3-dimensions, with optional satellite photo overlay.

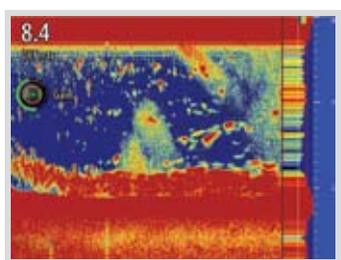
### CHART GS15 High Speed GPS Antenna

- Advanced 5Hz performance with a true update rate of 5 times per second for best in class position data during acceleration and high speed manoeuvres
- The Simrad GS15 works with SimNet and NMEA 2000® networks for enhanced location accuracy and improved satellite-signal fix.

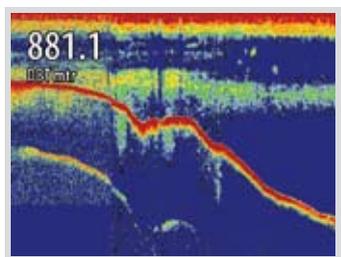


▲ GS15

## ECHO SOUNDING | BROADBAND SOUNDER



▲ Superior separation of bait and targets in shallow inshore waters.



▲ Maintain bottom lock offshore, at speed.

### ECHO BSM-1 Navico Broadband Sounder

#### ▶ Penetrate deep waters

Navico Broadband Sounders provide outstanding capability to track bottom and see structure in deep offshore terrain and canyons over 3,000 feet

#### ▶ Clearly define underwater structure

High-resolution linear receiver provides superior clarity in shallow and mid water

#### ▶ 'Whisper' into the water to find more fish

Navico Broadband Sounder technology matches exceptionally low power with efficient long pulses to make the perfect 'low-noise' Sonar.

#### ▶ Tri-frequency capability for optimal water column performance

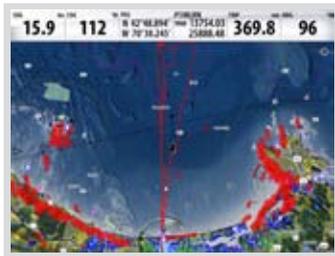
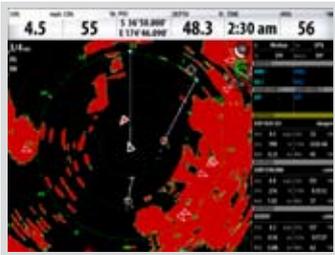
Better match the frequency with your fishing location: 200/83 kHz for inshore and coastal, 200/50kHz for offshore deepwater.



▲ BSM-1

## RADAR | BROADBAND OR HD DIGITAL RADAR

For six decades, Simrad Radars have been relied upon every day, all over the world by vessels with widely varying needs and functions.



▶ See our NSE Radar screenshot gallery online at [www.simrad-yachting.com](http://www.simrad-yachting.com)

### **RADAR** Broadband Radar

#### ▶ Crystal clear image

Miss none of your immediate surroundings. Fantastic for tight manoeuvres in marinas or in conditions of limited visibility.

#### ▶ InstantOn™

Solid-state technology produces an immediate, accurate on-screen image.

#### ▶ Low power consumption

Broadband radar requires very little power: ideal for all types and size of boat.

#### ▶ Extremely low emissions

This safest of radars means it can be mounted anywhere. Broadband radar has fewer emissions a mobile phone.

#### ▶ Quick installation

No reason to open the dome, no tune or zero mile adjustment, and best of all – no radar-licensed technician required.

#### ▶ Automatic clarity

Proven Auto Harbour and Offshore modes completely optimize the radar image – even on our shortest range of 200 feet. Just steer.

### **RADAR** HD Digital Radar

- Compact, high performance 2kW and 4kW radomes
- Exceptional performing 6kW, 10kW and 25kW open array radars
- Advanced HD digital signal processing for superior target detection
- 10-Bit Digital STC clears away clutter automatically



## INTEGRATION | AIS • VIDEO • SIMNET

### **INFO** AIS

Integrate with Simrad AI50 or NAIS-300 Class B AIS Systems to see and be seen. Overlay AIS-equipped vessel information on chart and radar displays.



### **INFO** SimNet & N2K

SimNet makes data sharing and system control easier and more flexible than ever before. Integrate Simrad autopilot, instruments, VHFs, sensors or any NMEA2000 engine or device to the intelligent SimNet backbone.



### **INFO** Video

Simrad NSE has both video input and video output capability. Two video inputs are available with the included RCA/NMEA cable. Output your Simrad NSE to any remote display or large screen via rear side DVI connection port.

### **INFO** Sirius Weather

Add the Sirius Weather Module for a whole new picture. Sirius Mariner and Voyager weather subscriptions gives you the full suite of weather, sea and atmospheric conditions along with stereo quality music and sports including NFL, NASCAR and College Football broadcasts.

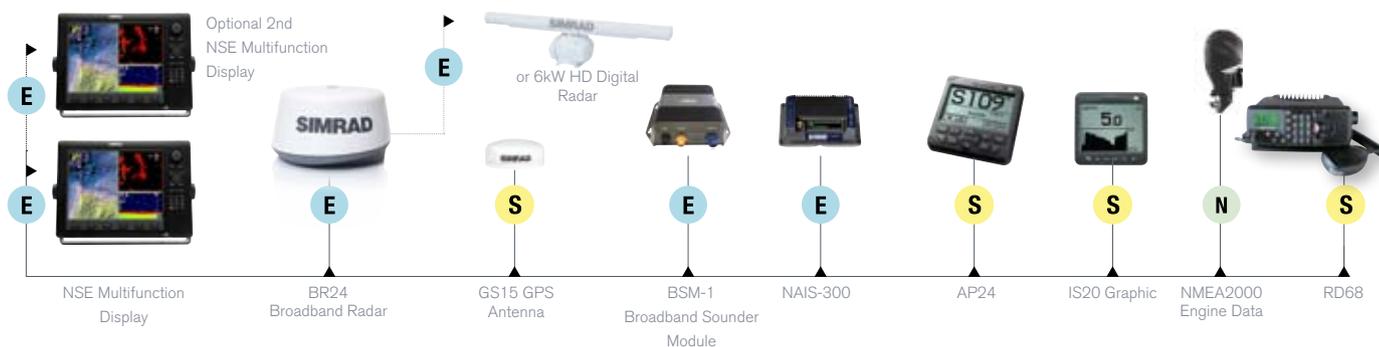
# Suggested systems

Build a performance system for your boat

## • POWER BOATS



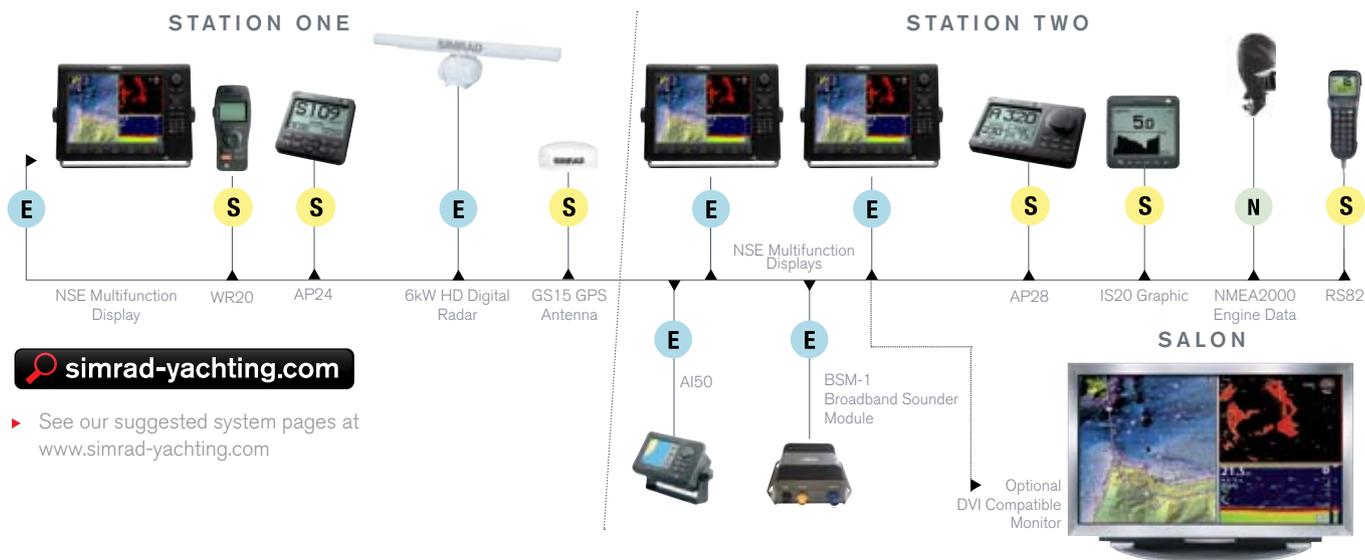
► 26-40 ft.



## • POWER BOATS - DUAL STATION



► 36 ft. +



## BRADLEY JONES:

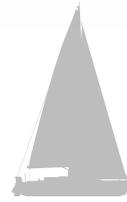
### Bradley Jones | Owner / Skipper | 95' Passenger Vessel

Bradley is the owner of a small, seasonal Whale Watch/Fishing business. He is the operator of a 95' aluminium commercial boat that runs out of a small harbour. The sounder image allows him to put his customers precisely on the wreck and his radar lets him know if his intended location is crowded with boats before his arrival.

That's why Bradley chooses Simrad

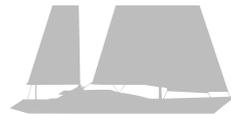
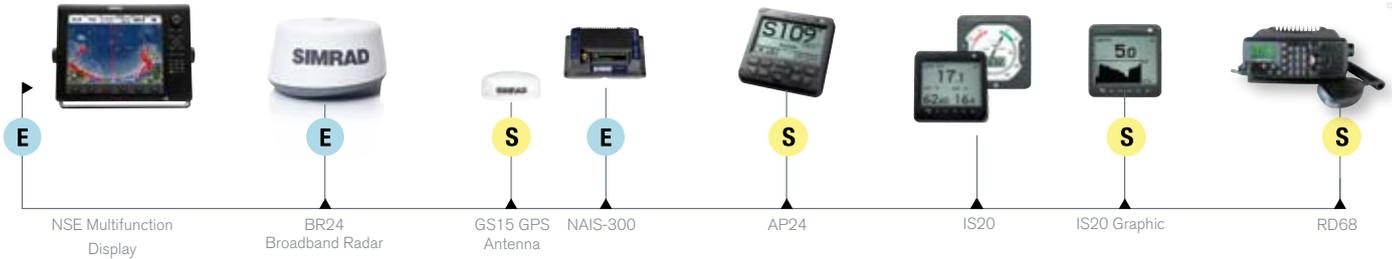


- KEY**
- N** NMEA2000
  - S** SimNet
  - E** Ethernet



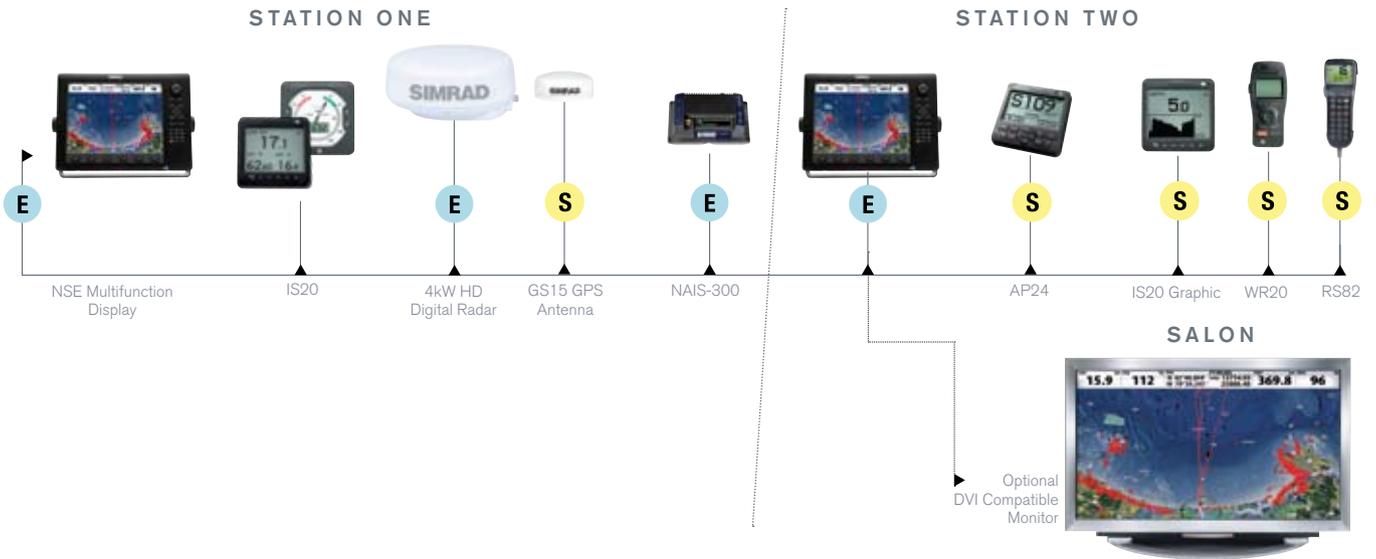
▶ 30-40 ft.

**• SAIL BOATS - SINGLE STATION**



▶ 40 ft. +

**• SAIL BOATS - DUAL STATION**



**BEAR GRYLLE:**

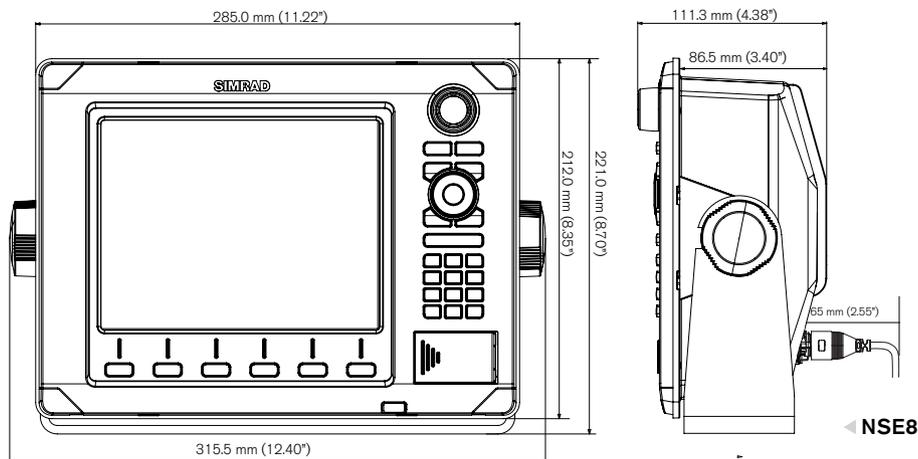


**Bear Grylls | Adventurer | 35' RIB**

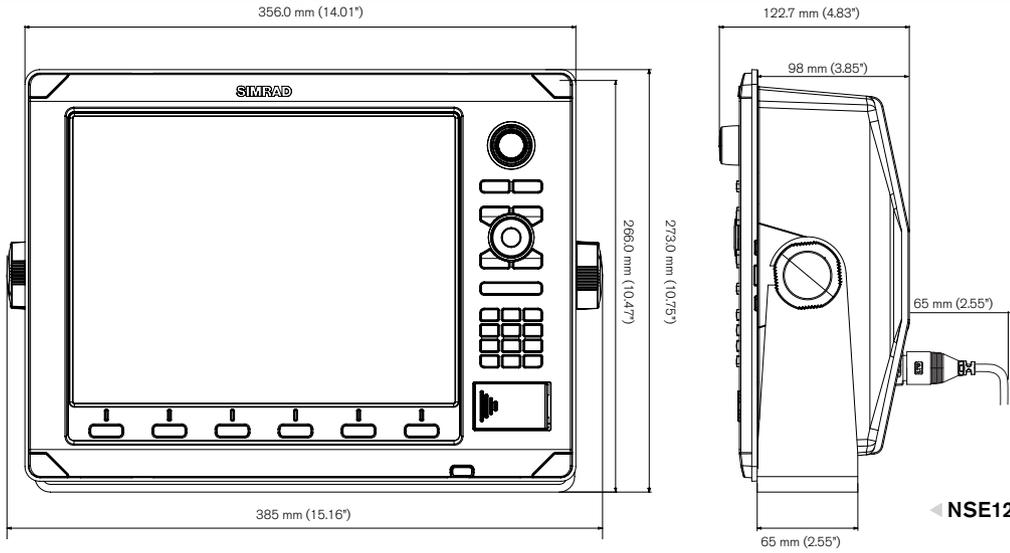
A former member of the British Special Forces and the youngest Briton to summit Mount Everest, Bear Grylls is an internationally renowned explorer and adventurer. He led the first unassisted crossing of the North Atlantic Arctic Ocean in an 11m RIB fitted with a Simrad navigation system, battling gale force winds, hypothermia, icebergs, storms and treacherous stretches of water. Bear insists on his boats being fitted with only the most reliable, robust and technologically advanced equipment, safety and performance are key to his success.

**That's why Bear chooses Simrad**

# Technical specifications



Multi Function Display ▼	NSE8	NSE12
<b>Display Unit</b>		
Type	8" Colour TFT LCD	12.1" Colour TFT LCD
Screen Size	8 inch diagonal viewing area	12 inch diagonal viewing area
Screen Resolution	800 x 600	1024 x 768
Screen Brightness	1500 Nits	1500 Nits
Contrast Ratio	850:1	600:1
Viewing Angle	60 Deg above and below normal axis with >75% nominal brightness > 100:1 Contrast Ratio 60 Deg Side to Side from normal axis with : > 75% Nominal brightness. 100:1 contrast ratio	
Languages (31)	English (UK), English (US), German, French, Spanish, Italian, Portuguese, Croatian, Finnish, Icelandic, Dutch, Norwegian, Polish, Swedish, Slovenian, Russian, Ukrainian, Bulgarian	
Unit Dimensions without bracket/knobs (H x W x D) mm	212.0 x 285.0 x 111.3 mm	266.0 x 356.0 x 122.7 mm
Unit Dimensions without bracket/knobs (H x W x D) in	8.35 x 11.22 x 4.38 in	10.47 x 14.01 x 4.83 in
Pack Dimensions (H x W x L) mm	220 x 300 x 390 mm	260 x 340 x 435 mm
Pack Dimensions (H x W x L) Inches	8.66 x 11.81 x 15.35 inches	10.24 x 13.39 x 17.13 in
Pack Weight	6.3 kg/12.6 lbs	8.5 kg/17 lbs
Case Pack Weight (2 Per Case)	12.7 kg/ 25.4 lbs	17.1 kg/ 34 lbs
<b>Mechanical</b>		
Housing Construction	Die Cast Aluminium Rear housing, Snap-fit front bezel	
Heat Sinking	Direct heat transfer from processor to housing	
Screen	Direct Bonded	
Processor/ RAM/ Hard Drive	1.6 GHz / 512 MB / 80 GB	
Interface	Direct Access Keys (DAK's), Alphanumeric Keypad, Rotary knob with Push-to-Enter	
<b>Plotter Characteristics</b>		
Display Modes	Head-up, Course-up*, North-up*, Relative Motion (*Heading input required)	
Latitude Limit	83° North, 85° South	
Alarms	Position, Off-Course, Waypoint Radius, Arrival, Anchor, Anchor Depth, Shallow, Deep, Water Temp Rate, Low Boat Speed, True Wind Shift, True Wind High, True Wind Low, Guard Zone 1 & 2, Voltage Hi/Lo, Missing Data: Depth/Rudder/Wind/Heading/Weather, Weather: Lightning, Severe Weather, Storm, Weather Watchbox, Vessels: Dangerous, AIS Lost, Message, MARPA Lost, MARPA Unavailable, Autopilot Alarms	
Cartography	Embedded: Navico Insight HD US/Navionics Platinum Rest of World; Navionics Platinum Plus via SD Card	
<b>Radar Characteristics</b>		
Radar Compatibility	Broadband: Simrad BR24; Simrad HD Digital Series 2kW to 25kW	
Display Modes	Head-up, Course-up*, North-up*, Relative Motion (*Heading input required)	
Echo Trail	Intervals: 15 sec, 30 sec, 1 min, 3 min, Continuous. Clear Trails	



Multi Function Display ▼	NSE8	NSE12
VRM/EBL's	2: User Configurable	
<b>Interface</b>		
LAN	3 Ports 10/100 Base	
Interface (NMEA 0183)	Input: GLL, GGA, RMC, RMB, GSA, GSV, APB, BWC, DBT, DPT, MTW, VLW, VHW, HDG	
Interface (NMEA 2000)	Output: GGA, GLL, GSA, GSV, VTG, ZDA, AAM, APB, BOD, BWC, BWR, RMC, RMB, XTE, DBT, DPT, MTW, VLW, VHW, HDG, MWV, TLL, TTM	
	Input: 59904, 60928, 65285, 65292, 65293, 65303, 65305, 65323, 65325, 65480, 126208, 126992, 126996, 127237, 127237, 127245, 127250, 127251, 127257, 127258, 127488, 127489, 127493, 127505, 127508, 128259, 128267, 128275, 129025, 129026, 129029, 129033, 129038, 129039, 129040, 129285, 129539, 129540, 129794, 129801, 129802, 130306, 130310, 130310, 130311, 130312, 130313, 130314, 130576, 130577, 130817, 130820, 130821, 130831, 130832, 130834, 130835, 130838, 130839, 130840, 130842, 130844, 130845, 130850, 130851, 130860	
	Output: 59904, 60928, 61184, 65292, 65287, 65289, 65290, 65293, 65303, 65305, 65323, 126208, 126996, 127237, 128259, 128267, 129285, 130577, 130818, 130819, 130831, 130835, 130836, 130837, 130839, 130840, 130844, 130845, 130850, 130851	
USB Port	(2) - 1 Front, 1 Rear	
Video Output	DVI-I x (1)	
Video Input	Composite Video x (2) (multiplexed)	
Video Compatibility	NTSC type N and 4.4.3, PAL type B, D, G, H, I, M, N User selectable	
SD Card Slot	Single	
<b>Environment</b>		
Temperature	-15 Deg C to +55 Deg C (+5 Deg F to +131 Deg F)	
Waterproofing	IPx7	
<b>Power</b>		
	12.0 VDC-24.0 VDC (9.0 - 34.0 VDC Min-Max)	
Current Draw (in Watts) at 12/24VDC Display only	21.6W or 1.8A @ 12.0 VDC or 21.6W or 0.9A @ 24VDC 33.6W or 2.8A @ 12.0 VDC or 33.6W or 1.4A @ 24VDC	
Certificates of Conformity	CE(EN60945:2002)/CTick	

**Best in class.** In every class.



**SIMRAD**

[www.simrad-yachting.com](http://www.simrad-yachting.com)

Navico Inc | United States of America

Nashua office: 410 Amherst Street | Suite 110 | 03063 Nashua, NH

Tulsa office: 12000 E. Skelly Drive | 74128 Tulsa, OK

Telephone: 1-800-628-4487 (toll-free within U.S.) or 603-324-2042 (direct) 12000