

# VisionMaster Integrated Bridge System

The intelligent bridge for the connected ship



Manoeuvring Orders Overhead 1		Overhead 2 Ownership Routes		Steering 2 Street 4	
System Date	23 Sep 2022	ANCHOR - MLRTM SHORT		Bow PIS	0.0 kn
System Time	20:23:36 UTC	Sailing To Buoy 11/13 (012)		CCRIP PIS	0.0 kn
Time Zone Offset	+2:0	To Waypoint	Leg Bearing	CCRIP FIA	0.0 kn
Set	072.8°	Buoy 11/13	291.3°	Stem PIS	0.2 kn
Drift	0.3 kn	Cross Track Distance	14 m PORT	STW	0.0 m
Depth	7.5 m	[Graph]		COG	289.3°
[Graph]		DWOL	0.55 NM	TWOL	00:05:48
[Graph]		ETA	23 Sep 2022 20:29	Position	51°58.379' N
[Graph]		BTW	263.8°	00°01.779' E	
[Graph]		Next WPT	Buoy YX-8	True Wind	Relative Wind
[Graph]		Overall TWOL	00:18:29	[Graph]	
[Graph]		Final ETA	23 Sep 2022 20:42	[Graph]	
[Graph]		Heading	238.0°	[Graph]	
[Graph]		ROT	0.1 °/min	[Graph]	
[Graph]		[Graph]			

# The intelligent bridge for the connected ship

**Different navigation systems from different vendors increases complexity with inconsistent user interfaces, settings, alert management and information displayed. This adds to the workload, stress and fatigue of bridge crews, which ultimately leads to more accidents. And reduces efficiency of shoreside teams that need to support different systems.**

Sperry Marine's VisionMaster Integrated Bridge System (IBS) combines industry-leading navigation equipment in one consistent, reliable, easy-to-use system. With secure connectivity to shore to support your digitalisation. Plus access to the market's best applications, content and digital services to bring more intelligence to your navigation. And safer, more efficient and sustainable operations.

## Consistent, real-time data

VisionMaster IBS brings together data from all onboard navigation systems and sensors to support the key navigation functions: route planning, route monitoring, collision avoidance, alert management and navigation status display.

Multifunction workstations can be configured to display radar images, electronic charts, conning information, CCTV images, chart radar and central alert management to enhance your operational flexibility and resilience. Navigational data is automatically synchronised across all workstations to ensure the latest information is always in use and reduce crew workload.

And all navigation functions have the same intuitive VisionMaster user interface that many mariners are familiar with for safe, easy operation.

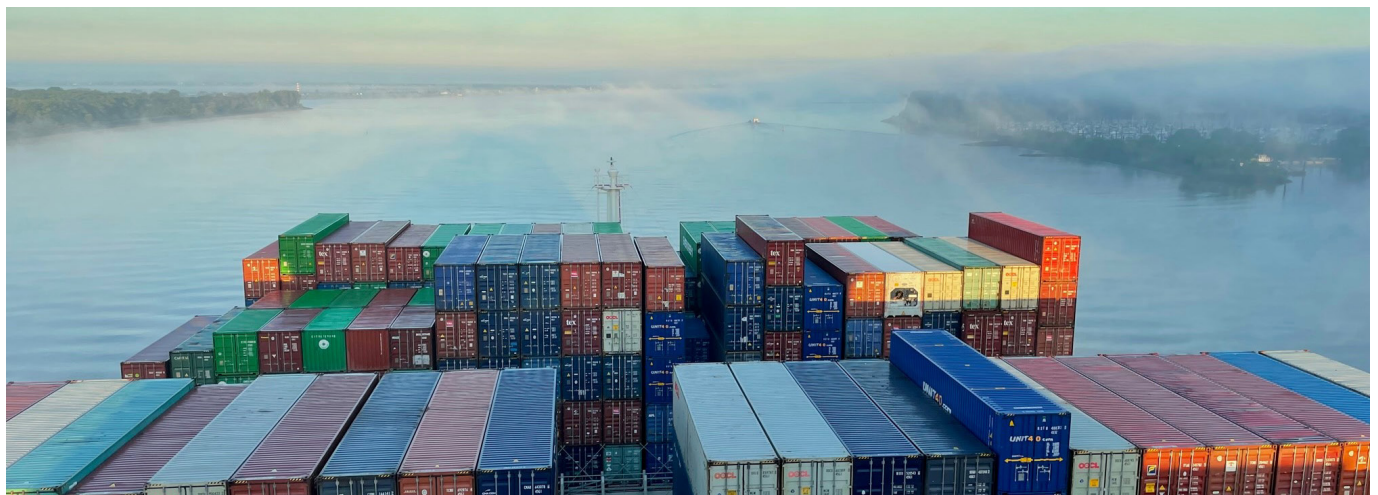
## Available anywhere

Key onboard navigational data is accessible from shore for simplified communication, improved operational visibility and decision making. It enables real-time situation, vessel performance and equipment data to be continuously monitored for risk assessment, fuel and motion optimisation, asset management, regulatory compliance and predictive maintenance purposes.

This capability ultimately allows fleet operation teams to provide route planning assistance, with system recommendations on speed and course to improve efficiency and reduce emissions. And enables Sperry Marine's Global Service Centre to provide remote support to reduce your through-life costs and maximise operational uptime.

## Lifetime support

Sperry Marine works closely with shipyards and owners to tailor the VisionMaster IBS to meet individual vessel requirements. We provide support throughout the complete lifecycle from design, installation, commissioning and acceptance, to maintenance and repair at the highest levels of 24/365 global service to always keep your vessel sailing.



# For safer, more efficient and sustainable sailing

## Improve situational awareness

- Combines main navigational data into one system for consistent, real-time display across all workstations
- Fully integrated radar solution that allows settings to be independently applied at each radar and ECDIS workstation for optimal radar presentation
- Integrated target management across radar and ECDIS for consistent identification

## Improve ease of use

- Consistent, familiar VisionMaster interface across all workstations
- Automatic data synchronisation between workstations
- Common settings automatically applied across all workstations
- Sensors for navigation data can be selected at any workstation and consistently applied across the IBS
- Integrated alert management with harmonised presentation across all workstations
- Simplified route planning with chart and route updates via the SperrySphere digital platform

## Improve flexibility

- Easily scalable system to suit a wide range of vessels
- Standardised displays for easy integration
- Multifunction workstations can be configured to any navigational system and be instantly repurposed
- Open system that allows Sperry Marine and third-party navigation equipment to be integrated

## Increase reliability

- Highly reliable sensors for providing essential data to navigation systems
- Critical navigation data and systems available across all workstations for enhanced resilience to equipment failure
- Global 24/365 service and support at every major seaport, at anchor, offshore and even in passage

## Safeguard cybersecurity

- Cyber-hardened equipment in secure navigation network designs
- Type-approved secure maritime gateway to protect navigation network
- USB-free data transfer between workstations and for chart updates and route exchange

## Stay compliant

- Type approved to all relevant standards
- Certified to requirements of all major international organisations, standards and class notations
- Satisfies all key requirements for customer-specific carriage, class and flag state
- Through-life support to maintain regulatory compliance

## Reduce through-life costs

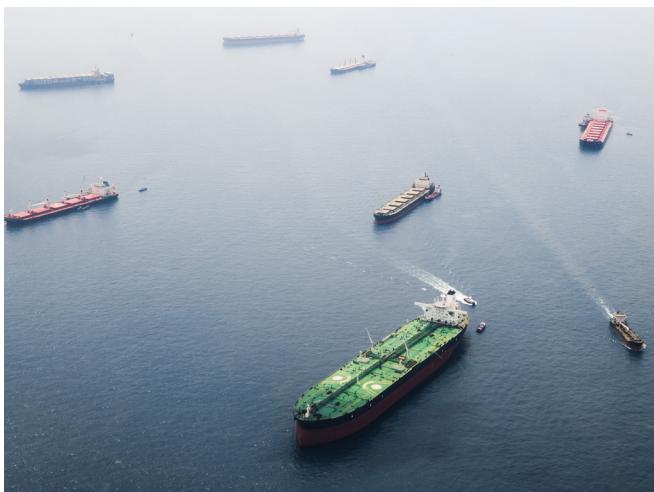
- Single provider for easier supply chain management
- Simplified system design with fewer components for quicker installation
- Common software and hardware across VisionMaster IBS for easy integration, upgrade and maintenance
- Multifunction workstations for optimal use of bridge space
- Remote asset management of navigation equipment and health status monitoring for preventative maintenance

## Extend system life

- System support for at least 10 years after end of product life with spare parts available and backward compatibility on new products

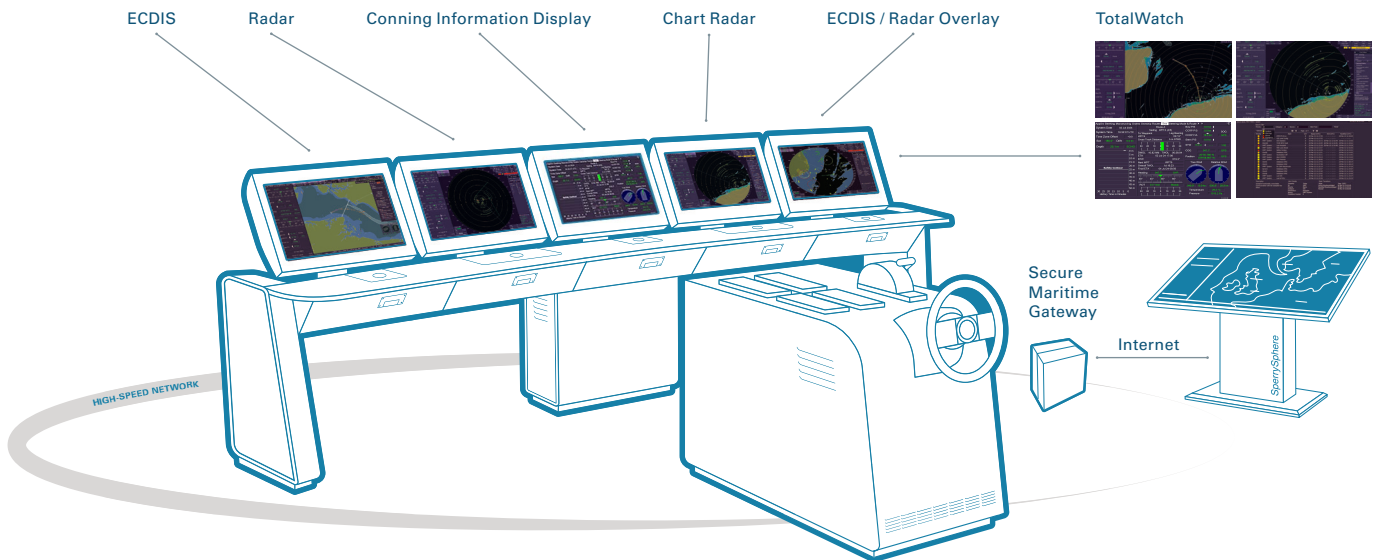
## Reduce emissions

- Sustainably sourced components
- Sperry Marine is certified to ISO 14001 for Environmental Management Systems
- Collect navigation system data to analyse fleet performance and reduce fuel use



# Your VisionMaster Integrated Bridge

A fully connected system of industry-leading navigation equipment in a customized, modular design to meet each vessel's requirements.



## Underpinned by

### Consistent Common Reference System

*Synchronises navigational data across all workstations.*

### VisionMaster User Interface

*Consistent user experience across all workstations.*

### Secure Connectivity

*Integrates your bridge to shoreside operations.*

### Through-Life Support

*Certified global 24/365 service and support.*

## Navigation Control Functions

### NAVIPILOT

Networked, self-adaptive heading control system that combines industry-leading performance with quicker deployment and easier operation via a colour touchscreen. Keeps vessels more efficiently on course, continually adapting to vessel load and sea conditions to minimise rudder movement and reduce fuel consumption and emissions.

### NAVIGUIDE

Flexible electrical steering control system for single or dual rudder vessels. Capable of controlling diverse steering gear types with different interfaces. Supports a range of different steering modes: non-follow-up, single or dual follow-up, autopilot.

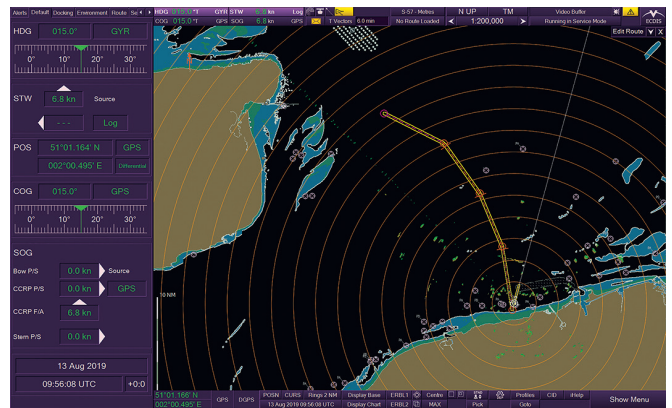
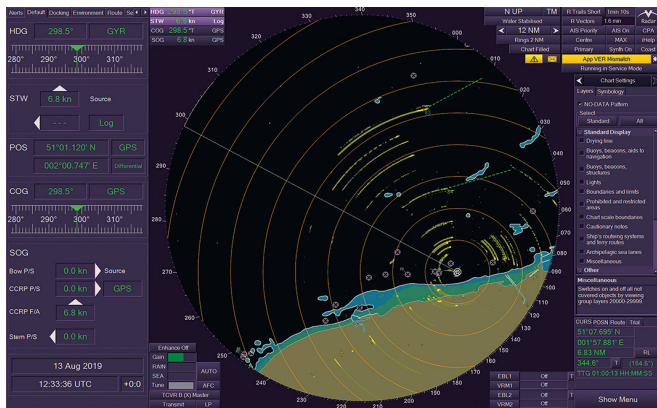
### Track Control

Fuel-efficient, IMO-compliant Track Control System that is tightly integrated with Sperry Marine's autopilot, NAVIPILOT.

### Speed Control

Optional integration with selected propulsion control systems so that speed orders can be set in VisionMaster ECDIS. Manual and route-based speed control, plus Just-In-Time Arrival planning at a specified waypoint is available.

# Navigation Systems

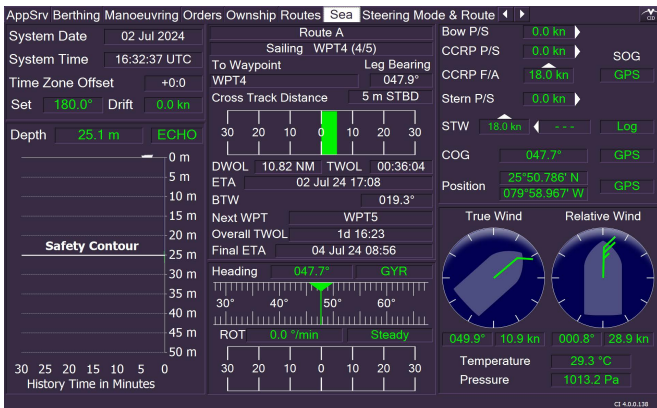


## VisionMaster Radar

Industry-leading target detection and tracking in all sea states that's reliable, easy and accurate. Delivers precise radar images through a clear, intuitive interface to reduce collision risk and simplify watch standing. Comprehensive range of type-approved radar sensors available with X- and S-band antennas. Dual radar option overlays radar images and target data from two independent transceivers for a seamless 360° view on one screen with no blind arcs. VisionMaster IBS applies a common track table and collision avoidance settings across all workstations.

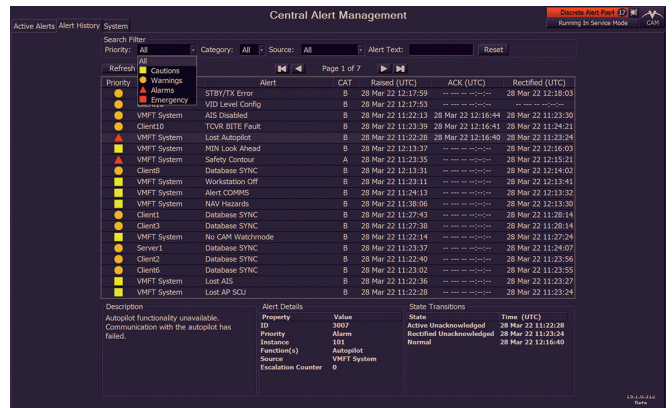
## VisionMaster ECDIS

Industry-leading route planning and monitoring solution that's fully compliant, fast, easy and accurate. Clear intuitive interface optimises situational awareness and reduces risk of accidents. VisionMaster IBS applies consistent route plans and route monitoring settings across all workstations.



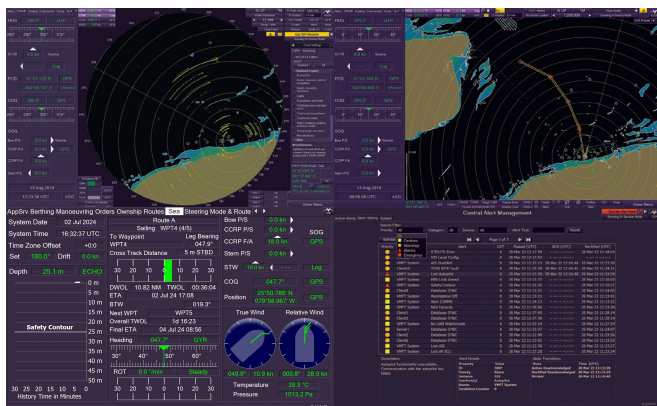
## Conning Information Display

Customisable to vessel requirements and certified by class society. Mariner can select conning information for display according to current navigational task.



## Central Alert Manager

Consistently manages alerts across the system and provides an overview of all active alerts for acknowledgement or silencing, plus alert history list.



## VisionMaster TotalWatch

Multifunction display that seamlessly integrates VisionMaster Radar, ECDIS, Conning Information Display, Central Alert Management and third-party applications with easy switching between different functions as needed. Improves flexibility and resiliency of vessel operations, while optimising use of bridge space. Sperry Marine offers a comprehensive range of workstation formats to suit different vessel requirements, which incorporate standard hardware for easy integration.

# Sensors

All sensors have been designed by Sperry Marine or carefully selected to be fully interoperable with the VisionMaster IBS.

## NAVIGAT Gyros

The most accurate and reliable compass solutions, together with CompassNet, the most cost-efficient networked heading management system. Broadest range of spinning mass and fiber-optic gyros available.

## JUPITER Magnetic Compass

Accurate, dependable system for essential navigation data with optional NAVIPOL binnacles.

## NAVIKNOT Speed Log

Multi-sensor speed log that measures Speed Over Ground and Speed Through Water via electromagnetic sensors, Doppler transducers and satellite sensors.

## Other Sensors

(D)GNSS position receivers; Automatic Identification System (AIS); Echosounder; Wind and weather sensors; Bridge Navigational Watch Alarm System; Sound reception; Weather fax; CCTV.

# Voyage Data Recorder

## VoyageMaster VDR

Industry-leading Voyage Data Recorder system that's reliable, efficient and flexible. Secures vital information on vessel operations using the latest IoT capabilities to help prevent safety incidents and optimise performance. Continuously records real-time data from signal sources on board and securely transfers this to shore for easy access in the cloud. Sperry Marine is also approved to carry out Annual Performance Tests for IMO certification.

# Radio and Satellite Communications

## Compliance

GMDSS-compliant communications, including UHF, VHF, MF/HF, NAVTEX and satellite systems.

# Additional Capabilities

## VisionMaster TotalCommand

Docking assistance overlay that provides a 360° view via a quad-channel, close-range radar fully integrated into the VisionMaster IBS for enhanced situational awareness.

## Berthing Assistance

Indicates distance and approach speed to the quayside for improved safety and efficiency during docking and berthing.

## Video Assistance

360° video view for improved situational awareness and real-time decision making during berthing, pilot boarding and disembarkment procedures berthing.

# SperrySphere Digital Platform

Provides secure connectivity and innovative applications, content and digital services in a single platform to support your digitalisation and bring more intelligence to your navigation.

## Secure Maritime Gateway

Provides a secure link between the VisionMaster IBS and shore for IoT data transfer and to enable remote support and digital services to connect to the bridge.

## Digital Services

Wide variety of industry-leading applications available to enable safer, more efficient and sustainable navigation: E-Navigation, Navigation Assistance, Vessel Performance, Smart Support



## Lifetime Support

When you buy a VisionMaster Integrated Bridge System from Sperry Marine, our philosophy is to support you throughout its entire lifetime – and that of the vessel – from design, installation, maintenance and repair to managing its obsolescence and eventual replacement.

### Design Consultancy

We work closely with vessel owners, shipyards and class authorities to design a customized solution that meets compliance, safety and efficiency requirements. This includes standard systems and bespoke development according to the needs of each vessel.

Cybersecurity is a key consideration, with network segregation to ensure navigation systems are not directly connected to the internet, and any incoming data, such as charts and routes, is strictly controlled. Sperry Marine prepares all final system drawings for class compliance.

### Commissioning and Acceptance

Once installation is complete, we set up the configuration according to features required and ensure system integration is performing correctly. This includes testing in harbour and at sea prior to final acceptance by class societies.

### Global Service and Support

Sperry Marine is proud to provide the highest levels of 24/365 support at every major seaport worldwide, at anchor, offshore and even in passage to always keep your vessel sailing. We continue to support our systems for at least 10 years after their end of life, giving you peace of mind that spare parts will continue to be available long after the initial purchase.

Sperry Marine provides service and support through our own team of over 150 experts and over 100 authorised service partners. All Marine Service Engineers are certified and continually monitored to ensure they install, maintain and repair our products to the highest standards on a consistent global basis.

Choose between one of our Service Contracts for a fixed annual fee per vessel to make budgeting easier, or our Pay As You Go Service with no commitments.

### Smart Support

Smart Support applies this standard for the connected ship to shorten resolution times, reduce through-life costs, optimise system availability and maintain vessel schedules.

- **Inventory Management**

Ensure equipment is up-to-date and compliant; anticipate equipment obsolescence and retrofit; improve annual maintenance service monitoring.

- **Remote Maintenance and Service**

Faster service with reduced on-board attendance, turnaround time in port and through-life costs

- **Health Status Monitoring**

Receive alerts on system health and connectivity status; speed up decision making and response time

- **Remote Support**

Remote technical support from Sperry Marine experts

- **Remote Diagnostics**

Increase first-time fix rate and shorten resolution times; gather intelligence for predictive maintenance

You may also be interested in:



### VisionMaster TotalWatch

Multifunctional Radar, ECDIS and Conning Information Display.



### Compass Solutions

For safer, more efficient and sustainable sailing.



### CompassNet

Efficiently managing your redundant heading sensors on the bridge.



### NAVIPILOT 4500N

Keeping your vessel more efficiently on course, reducing fuel consumption, emissions and workload on the bridge.



### SperrySphere

The intelligent navigation platform for ships and shore.

## Global Service and Support

Sperry Marine provides service and support on a 24/365 basis at every major port worldwide, at anchor, offshore and at sea. All Marine Service Engineers are all certified to ensure they install, maintain and repair our products to the industry's highest standards on a consistent global basis. Please see [www.sperrymarine.com/services](http://www.sperrymarine.com/services) for full details of all our service locations.

## Find out more

Please visit [www.sperrymarine.com](http://www.sperrymarine.com) for more information on Sperry Marine's complete range of products and services. If you would like a quotation, please email [sales@sperrymarine.com](mailto:sales@sperrymarine.com).

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