# VoyageMaster IV VDR System

Industry-leading Voyage Data Recorder that is reliable, efficient and flexible



### IMO-compliant with the latest IoT capabilities

Voyage Data Recorders (VDRs) and Simplified Voyage Data Recorders (S-VDRs) are similar to black boxes carried on aircraft, recording data and events onboard. To assist in the investigation of an accident, large passenger ships and cargo vessels are required to carry a VDR/S-VDR. However, many of the existing vessels are equipped with basic, out-of-date systems that do not comply with current carriage regulations. Malfunctions may not trigger built-in alarms and not all data is recorded to a suitable standard.

VDR data is usually only downloaded after a major incident. And only then it is noticed that data is damaged, incomplete or irrelevant.

Even for new buildings, selecting the right VDR system is key to be able to record and read all data formats from mandatory signal sources.

VoyageMaster IV VDR/S-VDR is an industry-leading Voyage Data Recorder system that's reliable, efficient and flexible. Using the latest IoT capabilities, it secures vital information on vessel operations to help prevent safety incidents and optimise performance.

It continuously records real-time data from signal sources on board and securely transfers this to shore for easy access in the cloud via the optional VoyageMaster Connect services. This allows investigators to analyse all activity before and after an incident. And shoreside teams have constant visibility of navigation systems for improved decision making and proactive management across your operations.

VoyageMaster IV VDR or S-VDR is a compact unit designed to withstand the toughest conditions. It's easy to install on new buildings or on retrofits using conversion kits. The system supports a wide range of communication protocols and converts them to a readable format. It's intuitive to use with analytical tools to make data interpretation simple. And presentation of information can be customised and replayed for reference or training.

All software and data can be instantly transferred to a replacement unit to save time and costs during service or repair and keep your vessels on schedule. And with Sperry Marine, you can be assured of the highest standard of service and support on a 24/365 consistent global basis.

Function	Details
Standard Configuration	Data Acquisition Unit
	• Fixed Capsule, MK IV
	Float-free Capsule, FF MK II
	Bridge indoor and outdoor microphones
	VDR Explorer playback software
	Sensor Interface Unit and/or Remote Video Interface
Optional Capabilities	Ship-to-shore data transfer with VoyageMaster Connect
	Extended data storage for detailed historical analysis
Annual Performance Tests	Sperry Marine is approved to perform mandatory Annual Performance Tests (APT) and certification for the VoyageMaster IV VDR in accordance with IMO requirements
Standards Applied	<ul> <li>Approvals: IMO resolution MSC.333(90) as amended by MSC.494(104) and IEC 61996-1 Ed. 2.0: 2013+A1:2021)</li> </ul>
	<ul> <li>Records data over network channels via the international standard IEC 61162-450</li> </ul>

## For safer, more efficient and sustainable sailing

#### Stay compliant

- Type approved to the IMO performance standard
- Meets all applicable IMO and IEC standards

#### Improve situational awareness

- Instantly replay cloud-recorded VDR data onshore via the optional VoyageMaster Connect services.
- Capture high quality information for longer durations with high resolution images and video
- Analyse VDR data easily to help improve decision-making

#### Increase reliability

- Robust compact system with fewer components and no moving parts
- Designed to withstand heavy weather, collisions, fire and immersion in several metres of water
- Analyse VDR data to identify navigation system issues
- Global 24/365 service and support at every major seaport, at anchor, offshore and even in passage

#### Safeguard cybersecurity

- Secure VDR data transfer to shore via VoyageMaster Connect with end-to-end encryption
- VoyageMaster Connect's built-in firewall protects against cyberattacks and unwanted traffic

#### Reduce through-life costs

- Easy to install: retrofit conversion kit available; reuse existing cables and interface units; existing VDR data preconfigured for quick setup on new unit
- Instantly transfer VDR software and data to replacement unit during service or repair
- Monitor navigation system performance for preventative maintenance purposes
- Analyse alarms and troubleshoot issues from shore before arranging service visits

#### Improve ease of use

- Intuitive Windows-based interface
- Remotely access recorded data
- Automated data transfer from ship to shore

#### Optimise operational schedule

- · Share essential data with authorities, accident investigators and insurance companies without vessels needing to return to port
- Conduct remote configuration and pre-APT checks to identify spares required, speed up APTs and reduce in-port turnaround
- Eliminate in-port delays with instant transfer of VDR software and data to replacement unit during repairs

#### Improve flexibility

- Supports a wide range of communication protocols and converts them to a readable format
- Customise presentation of recorded data
- Export data for playback and analysis on board and ashore
- Option to increase storage and add enhanced video, audio and signal capabilities

#### Extend system life

 System support for at least 10 years after end of product life with spare parts available

#### Reduce emissions

• Collect navigation system data to analyse fleet performance and reduce fuel use



## The navigation experts

Sperry Marine delivers industry-leading, maritime navigation solutions that ensure your vessel operations are safer, more efficient and sustainable.

These integrate systems, digital services and support to suit all your different vessel and operating requirements. Our extensive portfolio includes radars, ECDIS, compasses, steering systems, autopilots, speed logs and Integrated Bridge Systems. And secure, connected services that support your digital transformation.

Our global service network covers all the major shipping areas in Europe, Asia and the Americas. This comprises our own team of over 150 experts and 100 authorised service partners, who are all certified to ensure they install and support our products to the highest standards on a 24/365 consistent global basis.

Based on over 150 years' experience, Sperry Marine's navigation solutions are trusted on thousands of vessels at sea by the world's leading shipping companies.

## 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 for full details of all our service locations.

## Find out more

Please visit www.sperrymarine.com for more information. If you would like a quotation, please email sales@sperrymarine.com.

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