

TYPE EXAMINATION CERTIFICATE (MODULE B)

Certificate no.:
MERB0001N7V
Revision no.:
0

This Certificate is issued by DNV UK Limited based on authorisation of the Maritime & Coast Guard Agency (MCA) as an UK Approved Body to undertake conformity assessments on marine equipment in accordance with the requirements of the Merchant Shipping (Marine Equipment) Regulations 2016 as amended.

This is to certify:

that the **Transmitting heading device THD (GNSS method)**

with type designation(s)
NAVISTAR

issued to

Sperry Marine B.V. - German Branch
Hamburg, Germany

is found to comply with the Regulation (UK) **MSN 1874 Amendment 10** for
Item no. **UK/4.41 (Row 2 of 2)**

according to the following requirements:

SOLAS 74 Reg. V/19, IMO Res. A.694(17), IMO Res. MSC.116(73), IMO Res. MSC.191(79), IMO Res. MSC.302(87), SOLAS 74 Reg. V/18, SOLAS 74 Reg. X/3, IMO Res. MSC.36(63)-(1994 HSC Code) 13, IMO Res. MSC.97(73)-(2000 HSC Code) 13

Further details of the equipment and conditions for certification are given overleaf.

Date of issue: **2025-08-19**

Expiry date: **2030-08-18**

DNV local unit:
Hamburg – CMC
North/East

Approval Engineer:
Jörg Rebel



Approved Body No.: **0097**



for **DNV UK Ltd.**

Digitally Signed By:

Christine Mydlak-Röder

Christine Mydlak-Röder
MER Service Responsible



**Maritime &
Coastguard
Agency**

UK Approved Body Authorised
by the MCA

This certificate will not be valid if the manufacturer makes any changes or modifications to the approved type of equipment, which have not been notified to, and agreed with the approved body named on this certificate.

During the period of validity of this certificate the applicable regulations (international conventions and the relevant resolutions and circulars of the IMO) and testing standards may change, therefore the product conformity may need to be re-assessed by the Approved Body.

"The Mark of Conformity" may only be affixed to the above type approved equipment and a Manufacturer's Declaration of Conformity issued when the production-control phase module (D, E or F) of Schedule 2 of the Merchant Shipping (Marine Equipment) Regulations 2016, as amended is fully complied with and controlled by a written inspection agreement with an approved body. In case limitations of use apply, these should be indicated in the Annex.

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to USD 300 000.

Product description

Please see Appendix: Product Description

Application/Limitation

- The equipment is able to provide position data on the serial output.
- This Certificate does not cover approval of the equipment as GPS (item MED/4.63).

Type Examination documentation

Please see Appendix: Type Examination Documentation

Tests carried out

- Environmental and EMC testing: IEC 60945 (2002) incl. Corrigendum 1 (2008)
- Interface testing: IEC 61162-1 (2016), IEC 61162-2 (1998)
- Presentation testing: IEC 62288 (2021)
- Bridge alert management testing: IEC 62923-1 (2018) and IEC 62923-2 (2018)
- Performance testing: ISO 22090-3 (2014)

Marking of product

According to IEC 60945, Sect.4.9:

The product to be marked with following information, where practicable:

- Identification of the manufacturer,
- Equipment type number or model identification under which it was type tested,
- Serial number of the unit,
- Compass safe distance.

Alternatively, the marking may be presented on a display at equipment start-up, and in case of fixed equipment compass safe distance may be given in the equipment manual.

APPENDIX

Type Examination documentation

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Document No.	Rev.	Title
11121-1E	2013-05-28	Report: LabTest Cert, Tests acc. to IEC60945, 9 and 10
11121-1S	2013-09-11	Report: LabTest Cert, Tests acc. to IEC60945, 7.2, 8.2 to 8.4, 8.7, 8.8 and 11.2
-	2013-09-06	Statement: ComNav, Waiver acc. to IEC60945, 8.12.1
BSH/4612/4412617 /13	2013-10-10	Report: BSH, Tests for G3 acc. to ISO 22090-3 (2004)
BSH/4612/4412617 /13-1	2013-10-10	Report: BSH, Tests for G3 acc. to IEC 61162-1 (2010) and IEC61162 (1998)
BSH/4612/4413108 /17	2017-02-21	Report: BSH, Tests for G2 acc. to ISO 22090-3 (2014), 4.8, 4.9, 6.3 and 6.4
BSH/4612/4413108 /17-2	2017-03-06	Report: BSH, Tests for G2 acc. to ISO 22090-3 (2014), 6.6 and 6.7
PTR-02110-001	2022-08-09	Report: ComNav, Tests for G2/G2B acc. to IEC 61162 (2016), 8.3.77 (RMC)
155-25	1	Report: Treo, Tests for Redundancy Module (Part number 060462-000-000) acc. to IEC 60945, 10.9
5017-0141-35	A	Report: Sperry Marine, Tests for integration of NAVISTAR 2 to CompassNet
5017-0141-36	A	Report: Sperry Marine, Tests for integration of NAVISTAR 2 to CompassNet acc. to ISO 22090-3 (2014) and IEC 62923-1/-2
056372	L	Manual: System operation, installation and service - CompassNet

APPENDIX

Product Description

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The transmitting heading device (THD) type NAVISTAR consists of the following components necessary for operation:

<i>Mandatory components:</i>		<i>Part number</i>	<i>Software</i>
GNSS Antenna type NAVISTAR 2		060461-0000-xxx	1.7.x
Redundancy module		060462-0000-xxx	
Converter and Amplifier Unit		074904-0000-xxx	3.xxx
Converter and Amplifier Board		025826-0000-xxx	3.xxx
incl. CAB/CAU Main PCB		020760-0000-xxx	3.xxx
Data Distribution Unit (DDU)		074907-0001-xxx	3.xxx
	or	074907-0002-xxx	3.xxx
NAVITWIN V		074902-0001-xxx	3.xxx
	or	074902-0002-xxx	3.xxx
<i>The following repeater may be used:</i>			
Steering Repeater (console mounted)		074881-0001-xxx	
Steering Repeater (console mounted)	(permanent magnetic heading)	074882-0001-xxx	
Repeater (bulkhead mounted)		074883-0001-xxx	
Bearing Repeater		074880-0001-xxx	
Bearing Repeater		074926-0000-xxx	
with			
Bearing Repeater Stand		074887-0000-xxx	
Bearing Repeater Stand		or 074911-0000-xxx	
or			
Bearing Repeater Bracket		074886-0000-xxx	
Bearing Repeater Bracket	(height adjustable)	or 074888-0000-xxx	
Terminal Box		074859-0000-xxx	