



中国船级社
CHINA CLASSIFICATION SOCIETY

证书编号/Certificate No.
LD26PTA00002_02

型式认可证书
CERTIFICATE OF TYPE APPROVAL

兹证明本证书所述制造厂具备按照下列标准的要求生产本证书所列产品的能力和条件。

This is to certify that the manufacturer stated in the certificate meets the requirements of the standards listed below and is available with the ability and conditions to produce the products described in the certificate.

制造厂/Manufacturer

Sperry Marine B.V.

地址/Address

118 Burlington Road, New Malden, Surrey KT3 4NR, United Kingdom

产品名称/Product

电子海图显示与信息系统
ELECTRONIC CHART DISPLAY AND INFORMATION SYSTEM (ECDIS)

附加标志/Notations

无/Nil.

认可标准/Approval Standard

- 国际海事组织海安会决议MSC. 232(82)《通过经修订的电子海图显示与信息系统(ECDIS)性能标准》
IMO Resolution MSC.232(82) Adoption of the Revised Performance Standards for Electronic Chart Display and Information Systems (ECDIS)
- 国际海事组织大会决议A. 694(17)《作为全球海上遇险和安全系统(遇险和安全系统)组成部分的船载无线电设备和电子助航设备的一般要求》
IMO Resolution A.694(17) General Requirements for Shipborne Radio Equipment Forming Part of The Global Maritime Distress and Safety System (GMDSS) and for Electronic Navigational Aids
- 国际海事组织海安会决议MSC. 191(79)《船载航行显示器有关航行信息显示的性能标准》
IMO Resolution MSC.191(79) Performance Standards for the Presentation of Navigation-Related Information on Shipborne Navigational Displays
- 国际海事组织航行安全分委会1503号通函《电子海图显示与信息系统良好实施指南》
IMO MSC.1/Circ.1503/Rev.2 ECDIS-Guidance for Good Practice
- IEC 61174:2015《船用航行和无线电通信设备及系统-电子海图显示与信息系统-操作和性能要求、试验方法和要求的试验结果》
IEC 61174:2015 Maritime navigation and radiocommunication equipment and systems - Electronic chart display and information system (ECDIS) - Operational and performance requirements, methods of testing and required test results
- IEC 60945:2002/COR1:2008《船用航行和无线电通信设备及系统-通用要求-试验方法和试验结果的要求》
IEC 60945:2002/COR1:2008 Maritime Navigation and Radiocommunication Equipment and Systems - General Requirements - Methods of Testing and Required Test Results
- IMO MSC. 302(87)《通过驾驶室警报管理性能标准》
IMO MSC.302(87) Adoption of performance standards for Bridge Alert Management

证书有效期至/This Certificate is valid until 2031年03月23日/ Mar. 23,2031

发证机构/中国船级社伦敦办事处
Issued by CHINA CLASSIFICATION SOCIETY London Office

签发日期 2026年03月24日
Date Mar. 24,2026

本证书根据中国船级社规范和相关规定签发。所有证书页为一个整体，必须同时使用。纸质证书每页均须由本社盖章方为有效，电子证书含数字签名方为有效，本证书复印件无效。任何单位和个人均不应摘录或节选本证书的部分内容。有关方对所持证书的真实性有疑问时，可以向本社检验机构咨询。本证书凡是未注明版本的规范，其(发证时)最新版本适用于本证书。
This Certificate is issued pursuant to the Rules of the Society and related regulation. All pages of the certificate are taken as a whole and are used simultaneously. No paper certificate page is valid without bearing the stamp of the Society, no electronic certificates is valid without the digital signature, and no copied form of the certificate is regarded as valid. Any part of the certificate is not to be extracted or abridged by any unit or individual in any form. Related parties who are doubted about the authenticity of the certificate may inquire of the Society or its offices. **For Rules with no version indication, their latest version (at the time of issuance of the certificate) applies to the this certificate.**



Form No: Q01.

联系方式/Contact Us, 见本社官方网站/See official web site of the Society (<http://www.ccs.org.cn>)

UTN:P026-23172272

8. IEC 61162系列标准《海上导航和无线电通信设备和系统—数字接口》
IEC 61162 series: Maritime Navigation and Radio Communication Equipment and Systems- Digital Interface;
9. IEC 62288: 2021《海上导航和无线电通信设备及系统—船载导航显示器上与导航相关的信息的表示法—一般要求、试验方法和要求的试验结果》
IEC 62288:2021 Maritime navigation and radiocommunication equipment and systems - Presentation of navigation-related information on shipborne navigational displays - General requirements, methods of testing and required test results
10. IEC 62065: 2014《海事导航和无线通讯设备及系统—航迹控制系统—操作及性能要求，测试方法及测试结果要求》
IEC 62065:2014 Maritime navigation and radiocommunication equipment and systems-Track control systems - Operational and performance requirements, methods of testing and required test results
11. MSC. 74(69) 附件2《关于航迹控制系统性能标准的建议案》
MSC.74(69) Annex 2 Recommendations on Performance Standards for Track Control Systems
12.
IMO MSC.466(101) Amendments To The Performance Standards For The Presentation Of Navigation-Related Information On Shipborne Navigational Displays(Resolution MSC.191(79)).
13.
IEC 61162-1:2016
14.
IEC 61162-2:1998
15.
IEC 61162-450:2018
16.
IEC 62923-1:2018
17.
IEC 62923-2:2018

用于/Intended for

船舶/Ships

产品明细/Product Description

电子海图显示与信息系統 (ECDIS) /Electronic chart display and information system (ECDIS) (M0001)

名称/Name	属性(值)/Value	单位/Unit
型号/Type	see additional page	

批准的图纸/Approved Drawings

图纸批准号/ Drawings Approval No. : NP21PPP03886, NP25PPP03039

产品认可试验报告/ Approval Test Report

试验报告编号/ Test Report No. : see additional pages

试验报告日期/ Test Report Date : 2026-03-24

认可后的产品检验方式/ Method of Product Inspection after Approval

认可后的产品检验由制造厂按本社批准的产品检验计划进行，本社在文件审核合格后颁发船用产品证书。

After approval, product inspection should be carried out by the Manufacturer in accordance with the product inspection scheme approved by the Society, and the Marine Product Certificate is issued by the Society upon satisfactory documents review.

认可保持条件/ Maintenance Requirements of Approval

1. 型式认可后，如果产品及其重要零部件的设计、所用材料或制造方法有所改变，且影响到产品的主要特性、特征；或产品的性能指标有所更改，且超过认可的范围，则有关图纸和文件应经检验机构审批。并在检验机构认为必要时，经本社检验人员见证有关试验和进行检查，其结果应能证实仍符合认可条件。

After type approval, if there are changes to the design, materials used or manufacturing method of the product and important components and such changes affect major characteristics and properties of the product, or property indexes of the product are changed and exceed the scope of approval, related drawings and documents are to be examined and approved by the concerned survey office. Where deemed necessary by the survey office, the surveyor to the Society will go to witness relevant tests and conduct inspection and the results should be able to demonstrate compliance with the approval

conditions.

2. 工厂的质量管理体系应保持有效运行，并且与认可时一致。如果质量管理体系发生改变，应经原体系认证机构审核并报本社批准。

The quality management system of the factory shall be ensure effective operation, and shall be the same as the situation of approval. If there are any changes to the quality management system, auditing of the original certification organization for quality management system and the society's approval shall be obtained.

3. 认可证书有效期内，如果出现可能导致本社取消认可的情况，工厂应及时采取有效的纠正措施。

Within the validity of the approval certificate, if cases occur that may cause the Society to withdraw the approval, the manufacturer should take corrective actions in a prompt and effective manner.

4. 在认可证书有效期内，本社检验人员可在未经事先通知的情况下对工厂的产品制造过程进行审核，以验证产品的生产是否符合业经本社批准的图纸和文件。工厂应予以配合。

Within the validity of the approval certificate, the surveyor to the Society may pay unannounced audit to the manufacturing process of the product in order to confirm whether it is in compliance with the drawings and documents approved by the Society. The factory should provide an active cooperation and necessary for the surveyor.

5. 型式认可A证书获得者应接受本社每年一次的定期审核，定期审核日为认可证书期满之日对应的每一周年日，检查工作应在周年日的前后三个月内进行。

Those who have obtained the certificate of type approval A should be subject to periodical audit every year. The date of periodical audit shall be each anniversary date which corresponds to the date of expiry of the relevant certificate and the periodical audit shall be done within a time span of three months before and after the annual surveillance date.

备注/Remarks

本证书基于原型式认可证书 (No. LD21PTA00005_03) 换新及变更并替代原证书。

This Certificate is renewed and modified from and supersedes the previous Type Approval Certificate No. LD21PTA00005_03.

本社已审核了产品厂无石棉声明，但本社的审核不免除产品厂按照合同关系向订货方保证产品无石棉的责任。

The declaration of asbestos-free submitted by manufacturer has been reviewed by the Society.

However, liability of the manufacturer to guarantee the products are asbestos-free to purchaser under contract will not be exempted.

中国船级社伦敦办事处

CCS London Office

注：本证书含有附页，共4页

Note: The certificate is attached with additional 4 page(s)

产品明细/Product Description

电子海图显示与信息系统 (ECDIS) /Electronic chart display and information system (ECDIS)

名称/Name	属性 (值) /Value	单位/Unit
型号/Type	VisionMaster Net ECDIS with Track Control	
系统组成/System Component	Refer to Remarks	
屏幕尺寸/Screen size	19", 24", 26" and 27"	
电源/Power source	100-240V AC, 50/60Hz	
软件版本号/Software revision	V5.1.0	
是否可作为后备布置/Whether for back-up arrangements	Yes	
是否具有RCDS 模式功能/Whether includes RCDS mode of operation	No	
是否具有雷达图像叠加功能/Whether includes radar overlay function	Yes	
S-57 版本号/S-57 edition	3.1	
S-52 版本号/S-52 edition	6.1	
表示库版本号/PresLib edition	4.0	
S-63 版本号/S-63 edition	1.2	
罗经安全距离/Compass safe distance	Standard: see product label Steering: see product label	
ENC 文本格式/ENC format	SevenCs, Cmap etc	
Other Description: Hardware: Display/ Processor: 19", 24", 26" & 27" Panel PC, 27" Monitor + Processor. PCIO Interface Unit Mains Distribution Unit (MDU) Control Panel Security Device NaviPilot Control and Display Unit (CDU) NaviPilot Autopilot Processing Unit (APU) Labjack USB Interface Unit Optional Units: Network Serial Interface Network Switch Power Supply(+5/12V DC) Serial Interface (External Serial Package) Steering Control Interface Unit (SCU) Modular Units: USB Port Trackball Control Panel On/Off Switch. S-64 edition: 3.0		

产品认可试验报告/ Approved Test Reports List:

1. 056403_B
2. 056403_Navipilot4500N_OperationManual_Rev.A
3. 056404_B
4. 056404_C
5. 056404_Navipilot4500N_ServiceManual_Rev.A
6. 073650.091.23_report_60945_emv_DCU32
7. 1023-0112-42
8. 1027-0112-10A
9. 124-25023-3 - Test report - NSI bv - joystick
10. 124-25023-4 - Test report - NSI bv - trackball
11. 20200831 CIA Slimline 19 Panel PC Display 06619-xxx
12. 21-E009028-BM-A01 Steering systems APU and CDU (EMV)
13. 23-18343_report_60945_klima&vib_DCU32
14. 243-21 V1U Final
15. 25951-60446_A
16. 409514 TRF ECDIS (Panel PC 19 SL) (w.o. flicker data)
17. 5032-0113-01_TypeApprovalTestPlan_Rev.A1
18. 5032-0141-01 Rev A_Acoustic Noise test_stamped
19. 5032-0141-03_TestReport_IEC62288_Rev.B1_stamped
20. 5032-0141-04_TestReport_IEC60945_Rev.A_stamped
21. 5032-0141-05_TestReport_ISO11674_Rev.A_stamped
22. 5032-0141-06_TestReport_IEC62923_Rev.A_stamped
23. 5032-0141-07_TestReport_IEC61162-1_Rev.A1_stamped
24. 5032-0141-08_TestSum.Rpt._Navipilot4500N_Rev.A1_stamped
25. 5032-0141-12_TestReport_Re-cert_HCS_Track_Ctrl._RevA_stamped
26. 5032-0141-17_Test_Report_ISO11674_Multiple_CDU_Rev.A2_stamped
27. 5032-0141-23_Test_Report_For_NAVIPILOT_4500N_Bug_Fixes_Rev.A
28. 5033-0141-01-A_Test_Summary_Report_new_CDU_module
29. 75959442 Report 01 Issue 1
30. Applica 20053 (EMC and Env. Report HT 00262 OPT-A1)
31. cert_BSH_1137_MCU32_BRC32_2024-01-25_R
32. cert_DNV_TAA00000M0-revision4
33. Corrosion_Waiver_DCU32
34. Document 75956857 Report 01 Issue 1 - signed
35. DZ10-4
36. DZ10-5
37. EKTOS P18-0055-1
38. EKTOS P20-0136_DuraPanel19_IEC60945
39. F210932E1

40. GA-V4.0.0-VMNet-004 (IEC 62288-2021 Gap Analysis for V4.0.0)
41. IA-V3.0.0-VMNet-038 - VM Net Display v3.0 Rev. 3
42. IA-V3.0.1-VMNet-043 Impact Assessment for VM Net Display v3.0.1 Issue 1
43. IA-V3.0.1.36-VMNet-045 (Impact Assessment v3.0.1.36) Iss 2
44. IA-V3.2.0-VMNet-052-RE (Impact Assessment for VM Net RE v3.2.0) Iss 1
45. IA-V4.0.0-VMNet-042 (Impact Assessment v4.0.0) Iss 2
46. IA-V4.1.0-VMNet-048 (Impact Assessment Display v4.1.0 RE v3.0.0)
47. IA-V4.1.0-VMNet-049 (Impact Assessment VM Net v4.1.0 & NP 4500N v3.0)
48. IA-v5.0.0-VMNet-050 Impact Assessment VM Net v5.0.0
49. IA-V5.1.0-VMNet-051 (Impact Assessment for VM Net Display v5.1.0) Iss 1
50. ISIC statement for Sperry Marine
51. JTUV030-1A_Change to Q170 - without AV mounts
52. JTUV031 (VM Net V3.0.0 - Various changes to HW)
53. JTUV033 VisionMaster Agent v4.1.0
54. JTUV034 VisionMaster Agent v4.1.0 Win7 Issue 3
55. JTUV035 Issue 1 (Panel PC Firmware Update)
56. JTUV037 Issue 2_Peripheral_Updates_NP4500N_SMG
57. JTUV042 Justification for inclusion of VMFT Control Panel - Issue 1c
58. JTUV043 Control Panel corrosion waiver
59. JTUV044-1A_NP4500N_DIU_updates
60. JTUV048 PPC serial module & Mbrd change
61. MEDB00006Y5_1 (DNV certificate for Heading Control)
62. NAVIPILOT 4500N, MED-B
63. NAVIPILOT 4500N, UKCA-B
64. Nemko E13184.00 (EMC_Rad._HT 00262 OPT-A1)
65. P22-0126 rev.1
66. P24-0058 DP238S
67. P24-0062 DP270S
68. P24-0117-2 DM270SL (27 MON - IEC60945)
69. REP037154_ECDIS report ISIC DuraPANEL 27 S (DNV)
70. REP063829_ECDIS report_ISIC DuraMON 27 SL (DNV)
71. SP 5P05962 rev. 1
72. TD-C-2294-25001-1 (Corrosion waiver - TBE38S0-2294-MC1)
73. TD-C-2327-25001-1 (Corrosion waiver - CST100F9-2327-MC9)
74. TD-C-2397-25001-1 (Corrosion waiver - CST100F9-2397-MC9)
75. TD-C-2422-25001-1 (Corrosion waiver - TBE38B0-2422-MC1)
76. TR-V3.0.0-VMNet-101 (System Performance Test)
77. TR-V3.0.0-VMNet-103 (IEC 62288 - 2014 Test Report) Iss 2
78. TR-V3.0.0-VMNet-106 (IEC 62065 - 2014 Test Report)
79. TR-V3.0.0-VMNet-107 (Additional Supporting Evidence)
80. TR-V3.0.0-VMNet-120 VM Net v3.0.0 & Agent v4.1.0 (Performance Test)

81. TR-V3.0.1-VMNet-122 (System Performance Test)
82. TR-V3.0.1-VMNet-124 (IEC 62288 - 2014 Test Report)
83. TR-V3.0.1-VMNet-126 (IEC 62065 - 2014 - V3.0.1 with NP 4500) Iss 2
84. TR-V3.0.1.36-VMNet-127 (IEC 62065 - 2014 - V3.0.1.36 with NP 4500)
85. TR-V3.0.1.36-VMNet-128 (System Performance Test)
86. TR-V4.0.0-VMNet-133 (IEC 62065 - 2014 Test Report)
87. TR-V4.0.0-VMNet-134 (System Performance Test)
88. TR-V4.0.0-VMNet-135 (IEC 62923-1 - 2018 Test Report)
89. TR-V4.0.0-VMNet-139 (IEC 62288 - 2021 Test Report) Iss 2
90. TR-V4.0.0-VMNet-140 (VMNet System Performance Test)
91. TR-V4.0.0-VMNet-141 (IEC 62065 - 2014 Test Report)
92. TR-V4.1.0-VMNet-146 (IEC 62288 - 2022 Test Report)
93. TR-V4.1.0-VMNet-147 (System Performance Test)
94. TR-V4.1.0-VMNet-148 (IEC 62065- 2014 Test Report) Iss 2
95. TR-V4.1.0-VMNet-151 (System Performance Test)
96. TR-V4.1.0-VMNet-159 (IEC 62065- 2014 Test Report)
97. TR-V4.1.0-VMNet-160 (IEC 62065- 2014 Test Report)
98. TR-V4.1.0-VMNet-161 (IEC 60945- 2002 Test Report)
99. TR-V5.0.0-VMNet-162 (IEC 61162-1- 2016 Test Report)
100. TR-V5.0.0-VMNet-163 (IEC 62288 - 2022 Test Report)
101. TR-V5.0.0-VMNet-164 (System Performance Test Report)
102. TR-V5.0.0-VMNet-169__IEC_62923-1-2018_Test_Report_
103. TR-V5.0.0-VMNet-172 (System Performance Test NP 4500)
104. TR-V5.0.0-VMNet-173 (IEC 62065- 2014 Test Report)
105. TR-V5.1.0-VMNet-181 (IEC 61162-1 - 2016 Test Report) Issue 1
106. TR-V5.1.0-VMNet-182 (IEC 61162-450 - 2018 Test Report) Issue 1
107. TR-V5.1.0-VMNet-183 (System Performance Test Report) Issue 1
108. YR40.242_marine_abs
109. YR40.242_marine_dnv