

TYPE APPROVAL CERTIFICATE

This is to certify:**That the Conning Display**with type designation(s)
JAN-9202

Issued to

Japan Radio Co., Ltd.
Mitaka Tokyo, Japan

is found to comply with

IMO Res. 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
MSC.191(79) Performance standards for presentation of navigation-related information on shipborne navigational displays
DNV GL rules for classification – Ships**Application :****Product(s) approved by this certificate is/are accepted for installation on NAUT(AW) vessels classed by DNV GL.**This Certificate is valid until **2021-01-12**.Issued at **Busan** on **2016-01-13**DNV GL local station: **Yokohama**Approval Engineer: **Kwang Whan Cho**for **DNV GL**

Baeg Soon Choi
Head of Section

This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid. The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.

Product description

The Conning Information Display, JRC JAN-9202, consists of the following components :

Description	Component	Location	Remark
Monitor Unit	NWZ-208	Protected	26 inch
Central Control Unit	NDC-1590	Protected	-
Power Supply Unit	NBD-913	Protected	-
Junction Box	NQE-1143	Protected	-
Sensor LAN Switch Unit	NQA-2443	Protected	-
Trackball Operation Unit	NCE-5605	Protected	-
Keyboard Operation Unit	NCE-5625	Protected	Optional
Software version	01.10.xxx		-

Application/Limitation

- The installation shall be verified and tested onboard according to manufacturer's installation instruction.
- The documentation of conning display HMI shall be submitted upon request for each case.
- The system shall be interfaced with JRC ECDIS JAN-7201/ JAN-9201.

Type Approval documentation

Tests carried out

- Environment test : IEC 60945 (2002)
- Serial Interface test : IEC 61162-1 (2010)
- Serial Interface test : IEC 61162-2 (1998)
- Presentation test : IEC 62288 (2014)
- DNV Rules for ships Pt.6 Ch.8 (January 2014)

Marking of product

The manufacturer and Type Designation to be applied to the equipment in a clear visible location and in addition the equipment shall be marked with serial number, safe distance to magnetic compass, power consumption and/or supply voltage.

Periodical assessment

The scope of the periodical assessment is to verify that the conditions stipulated for the type are complied with, and that no alterations are made to the product design or choice of systems, software versions, components and/or materials.

The main elements of the assessment are:

- Ensure that type approved documentation is available

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Certificate No: **TAA000005J**

- Inspection of factory samples, selected at random from the production line (where practicable)
- Review of production and inspection routines, including test records from product sample tests and control routines
- Ensuring that systems, software versions, components and/or materials used comply with type approved documents and/or referenced system, software, component and material specifications
- Review of possible changes in design of systems, software versions, components, materials and/or performance, and make sure that such changes do not affect the type approval given
- Ensuring traceability between manufacturer's product type marking and the type approval certificate

Periodical assessment is to be performed at least every second year and at renewal of this certificate.