

DET NORSKE VERITAS

TYPE APPROVAL CERTIFICATE

CERTIFICATE NO. A-11482
This Certificate consists of 3 pages

This is to certify that the
Peripheral Equipment
with type designations
Trackball panel and QWERTY panel

Manufactured by
Keytouch AS
SKOPPUM, Norway

is found to comply with
Det Norske Veritas' Rules for Classification of Ships, High Speed & Light Craft and
Det Norske Veritas' Offshore Standards

Application
Location classes:

Temperature	A*
Humidity	B
Vibration	A
EMC	B
Enclosure	A

*Low temperature tested to -15 °C

Place and date
Høvik, 2009-10-15
for DET NORSKE VERITAS AS



Local Office
DNV Sandefjord

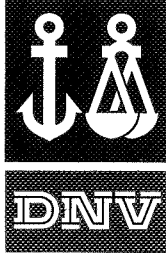
This Certificate is valid until
2013-12-31

Hanne Paulsen
Hanne Paulsen
Surveyor *SN*

Odd Magne Nesvåg
Head of Section

Notice: 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.

If any person suffers loss or damage which is proved to have been caused by any negligent act or omission of Det Norske Veritas, then Det Norske Veritas shall pay compensation to such person for his proved direct loss or damage. However, the compensation shall not exceed an amount equal to ten times the fee charged for the service in question, provided that the maximum compensation shall never exceed USD 2 million. In this provision "Det Norske Veritas" shall mean the Foundation Det Norske Veritas as well as all its subsidiaries, directors, officers, employees, agents and any other acting on behalf of Det Norske Veritas.



Cert. No.: A-11482
File No.: 899.60
Job ID: 262.1-007453-1

Product description

17610068 Trackball panel
17610070 QWERTY panel

Standard compass safe distance: 20 cm
Steering compass safe distance: 25 cm

Approval conditions

The Type Approval covers hardware listed under Product description. When the hardware is used in applications to be classed by DNV, documentation for the actual application is to be submitted for approval by the manufacturer of the application system in each case. Reference is made to DNV Rules for Ships Pt.4 Ch.9 Control and Monitoring Systems.

Type Approval documentation

Technical report 2009-3482, rev.01, dated 2009-09-18
Keytouch trackball datasheet, drawing no. 080528A
Keytouch keyboard datasheet, drawing no. 080528A
Keytouch trackball schematics, drawing no. 48410068, dated 2008-10-27
Keytouch QWERTY schematics, drawing no. 48410065, dated 2008-07-10
Keytouch trackball panel assembly, drawing no. 43610068, dated 2008-06-10
Keytouch QWERTY panel assembly, drawing no. 43610065, dated 2008-07-10

Tests carried out

Applicable tests according to Standard for Certification No. 2.4, April 2006.

Applicable tests for protected equipment according to IEC 60945, 4th edition (2002), except for test 8.12 Corrosion.



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Certificate retention survey

The scope of the retention/renewal survey 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 survey are:

- Ensure that type approved documentation is available
- 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

Retention survey is to be performed at least every second year and at renewal of this certificate.

END OF CERTIFICATE