

MARINE DIVISION
17 Bis Place des Reflets - La Défense 2
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**BUREAU
VERITAS**

Certificate N°:
11964/A1 BV
The attached Schedule forms part of the certificate

File Number : AP 3445
Product Code : 4483H

CERTIFICATE OF TYPE APPROVAL

This is to certify that the product identified below was found to be in compliance with the relevant hereunder stated Regulations & standards

DISPLAY MONITORS / VIDEO SCREENS / TERMINALS

Series: JH15T03 STD, JH15T03 MMD, JH17T01 MMD, JH18T04 MMD, JH19T01 MMD, JH20T03 MMD, JH20T03 MIL, JH20T04 MMD, JH23T02 MMD.

MANUFACTURED BY:

Jakob Hatteland Display AS
Oslo - NORWAY

SPECIFIED REGULATIONS & STANDARDS :
BV Rules for the Classification of Steel Ships.
IEC 60945 - IACS E10.

The Approval is valid until : 05.02.2008

BUREAU VERITAS OSLO



At Paris la Défense, on : 20.02.2003

J.BENOIT
For the Secretary

This Certificate remains valid until the date stated on, hereunder, unless cancelled or revoked, provided the conditions in the attached schedule are complied with and the equipment remains satisfactory into service.

This Certificate is not valid for equipment, the design or manufacture of which has been varied or modified from the specimen tested.

This Certificate is not valid without the stamp of the above mentioned by BUREAU VERITAS Inspection Center.

The manufacturer should notify BUREAU VERITAS of any modification or changes to the equipment in order to obtain a valid Certificate.

The latest published Regulations or Standards referred to, above, and the Marine Division General Conditions are applicable.



THE SCHEDULE OF APPROVAL

1. PRODUCT DESCRIPTION :

Model	Size	Data sheet n°
Maritime Multi Display:		
JH15T03 MMD	15 inch	Data sheet Rev. 5 dated 16.12.2002
JH17T01 MMD	17.4 inch	DS17T01 MMD Rev. 01/06
JH17T01 MMD (with bracket)	17.4 inch	Data sheet Rev. 4 dated 16.12.2002
JH18T04 MMD	18.1 inch	Data sheet Rev. 2 dated 16.12.2002
JH18T04 MMD (with bracket)	18.1 inch	Data sheet Rev. 5 dated 16.12.2002
JH20T03 MMD	20.1 inch	Data sheet Rev. 5 dated 13.12.2002
JH20T03 MMD (with bracket)	20.1 inch	Data sheet Rev. 5 dated 13.12.2002
JH19T01 MMD	19.0 inch	Data sheet Rev. 7 dated 03.01.2003
JH19T01 MMD (with bracket)	19.0 inch	Data sheet Rev. 6 dated 03.01.2003
JH20T04 MMD	20.1 inch	Data sheet Rev. 8 dated 09.01.2003
JH20T04 MMD (with bracket)	20.1 inch	Data sheet Rev. 3 dated 09.01.2003
JH23T02 MMD	23.1 inch	Data sheet Rev. 8 dated 09.01.2003
JH23T02 MMD (with bracket)	23.1 inch	Data sheet Rev. 3 dated 09.01.2003
Industrial TFT Display :		
JH15T03 STD	15.0 inch	Data sheet Rev. 4 dated 06.01.2003
JH15T03 STD (with bracket)	15.0 inch	Data sheet Rev. 5 dated 06.01.2003
Military Display :		
JH20T03 MIL	20.1 inch	Data sheet Rev. 2 dated 04.12.2002

2. DESIGN DRAWINGS and/or SPECIFICATIONS

Model	Drawings n°	User manual ref. n°
Maritime Multi Display:		
JH15T03 MMD	3076S3A1& 2972S3B1 A000104-1 (05-04-02)	Rev.1 dated 12.12.02
JH17T01 MMD	JH17T01 MMD - A1	Rev. 8 dated 12.12.2002
JH18T04 MMD	JH18T04 MMD - A1	Rev. 5 dated 12.12.2002
JH20T03 MMD	JH20T03 MMD	Rev. 3 dated 13.11.2001
JH19T01 MMD	A000043-1	Rev. 2 dated 12.12.2002
JH20T04 MMD	A000071-1	Rev. 2 dated 12.12.2002
JH23T02 MMD	JH23T02 MMD - A1	Rev. 3 dated 12.12.2002
Industrial TFT Display :		
JH15T03 STD	A000104-1 (05-04-02)	Rev. 3 dated 12.12.2002
Military Display :		
JH20T03 MIL	JH20T3 MIL - E1	Rev. 6 dated 12.12.2002

*Nb : This list can be revised to show changes to issue status of specifications, drawing and user manual.
Before changes can be implemented, new relevant documents must be provided to Bureau Veritas
for review and acceptance .
The new documents list will be stamped and endorsed accordingly.*

3. TYPE TEST REPORTS / LABORATORY RECOGNITION STATUS

Model	Test reports ref.:
Maritime Multi Display:	
JH15T03 MMD	DELTA n° K221787-1 (DANAK-195623) dated 2001.07.09
JH17T01 MMD	DELTA n° K221784-1 (DANAK-195543) dated 2001.05.14
JH18T04 MMD	DELTA n° K221785-1 (DANAK-195592) dated 2001.07.02
JH20T03 MMD	DELTA n° K221786-1 (DANAK-195599) dated 2001.07.06
JH19T01 MMD	DELTA n° E50053 (DANAK-196130) dated 2002.04.12
JH20T04 MMD	DELTA n° E500247 (DANAK-196170) dated 2002.04.30
JH23T02 MMD	DELTA n° E500508 (DANAK-196393) dated 2002.09.04
Industrial TFT Display :	
JH15T03 STD	DELTA n° 350370 dated 2002.01.25
Military Display :	
JH20T03 MIL	DELTA n° K221790-1 (DANAK-195920) dated 2001.12.13
JH20T03 MIL	DELTA n° K222072-3 (DANAK-195887) dated 2001.12.04

4. MATERIALS and/or COMPONENTS REQUIRED TO BE TYPE APPROVED

Nil.

5. OTHER MATERIALS and/or COMPONENTS

Nil.

6. APPLICATION / LIMITATION OF USE

6.1 - According to BV Rules for the Classification of Steel Ships.

6.2 - Approval valid for steel ships intended to be granted with the following additional class notations: AUT-UMS, AUT-CCS, AUT-PORT and AUT-IMS.

6.3 - As referred to in clause 2.

7. PRODUCTION SURVEY REQUIREMENTS

7.1 - Arrangements shall be made for a Society's Surveyor to carry out, on a periodic basis, visits of the Manufacturer's premises and product audits.

7.2 - Each equipment is to be supplied with manual(s) for installation, use and maintenance.

8. ON BOARD INSTALLATION & MAINTENANCE REQUIREMENTS

According to BV Rules for the Classification of Steel Ships, and Manufacturer's requirements.

9. MARKING FOR IDENTIFICATION

- Trade name.
- Date of manufacture and serial number.
- Equipment type number or model identification under which it was type-tested.

10. OTHERS

10.1 - This approval is given on the understanding that the Society reserves the right to require check tests to be carried out on the units at any time, and that **Jakob Hatteland Display AS, Oslo - Norway**, will accept full responsibility for informing shipbuilders, shipowners or their sub-contractors of the proper methods of use and general maintenance of the units and the conditions of this approval.

10.2 - This Certificate supersedes the Type Approval Certificate N° 11964/A0 BV issued on 05.02.2003 by the Society.

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