Certificate no.:
TAA00003JG

TYPE APPROVAL CERTIFICATE

This is to certify:

that the Hands Free Voice Talk Back System

with type designation(s)
Marine wired talk-back system

issued to
HANGZHOU HUAYAN DIGITAL ELECTRON CO.,LTD
Hangzhou, **China**

is found to comply with
DNV rules for classification – Ships, offshore units, and high speed and light craft

Application:

See page 2

Temperature	**A (D:YDF-48FS, YDF-48FT, YDF-32FS, YDF-32FT, YDF-16FS, YDF-16FT, YDF-1FS, YDF-1FT)**
Humidity	**B**
Vibration	**A**
EMC	**B**
Enclosure	**See Product Description**

Issued at **Høvik** on **2025-04-05**
This Certificate is valid until **2030-04-04**.
DNV local unit: **Shanghai**

for **DNV**

Approval Engineer: **Steinar Kristensen**

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.

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

The Marine wired talk-back system consists of the following modules[1)]:

Module	Product Name	Model	Environment
Marine wired talk-back main units	Marine wired talk-back main unit (48 way, flush-type, handheld microphone)	YDZ-48QS	IP22
	Marine wired talk-back main unit (48 way, wall mounted, handheld microphone)	YDZ-48GS	IP44
	Marine wired talk-back main unit (48 way, flush-type, gooseneck microphone)	YDZ-48QM	IP22
	Marine wired talk-back main unit (48 way, flush-type)	YDZ-48GM	IP44
	Marine wired talk-back main unit (32 way, flush-type, handheld microphone)	YDZ-32QS	IP22
	Marine wired talk-back main unit (32 way, wall mounted, handheld microphone)	YDZ-32GS	IP44
	Marine wired talk-back main unit (32 way, flush-type, gooseneck microphone)	YDZ-32QM	IP22
	Marine wired talk-back main unit (32 way, flush-type, gooseneck microphone)	YDZ-32GM	IP44
	Marine wired talk-back main unit (16 way, flush-type, handheld microphone)	YDZ-16QS	IP22
	Marine wired talk-back main unit (16 way, wall mounted, handheld microphone)	YDZ-16GS	IP44
	Marine wired talk-back main unit (16 way, flush-type, gooseneck microphone)	YDZ-16QM	IP22
	Marine wired talk-back main unit (16 way, flush-type, gooseneck microphone)	YDZ-16GM	IP44
Marine wired talk-back extensions	Marine wired talk-back extension (48 way, flush-type, handheld microphone)	YDF-48QS	IP22
	Marine wired talk-back extension (48 way, wall mounted, handheld microphone)	YDF-48GS	IP44
	Marine wired talk-back extension (48 way, flush-type, gooseneck microphones)	YDF-48QM	IP22
	Marine wired talk-back extension (48 way, wall mounted, gooseneck microphones)	YDF-48GM	IP44
	Marine wired talk-back extension (48 way, wall mounted, for use with headset)	YDF-48GT	IP44
	Marine wired talk-back extension (48 way, weatherproof, for use with headset)	YDF-48FT	IP56
	Marine wired talk-back extension (48-Way, weatherproof, handheld microphone)	YDF-48FS	IP56
	Marine wired talk-back extension (32 way, flush-type, handheld microphone)	YDF-32QS	IP22
	Marine wired talk-back extension (32 way, wall mounted, handheld microphone)	YDF-32GS	IP44
	Marine wired talk-back extension (32 way, flush-type, gooseneck microphone)	YDF-32QM	IP22
	Marine wired talk-back extension (32 way, wall mounted, gooseneck microphone)	YDF-32GM	IP44
	Marine wired talk-back extension (32 way, wall mounted, for use with headset)	YDF-32GT	IP44
	Marine wired talk-back extension (32 way, weatherproof, for use with headset)	YDF-32FT	IP56
	Marine wired talk-back extension (32-way, weatherproof, handheld microphone)	YDF-32FS	IP56
	Marine wired talk-back extension (16 way, flush-type, handheld microphone)	YDF-16QS	IP22
	Marine wired talk-back extension (16 way, wall mounted, handheld microphone)	YDF-16GS	IP44
Marine wired talk-back extensions	Marine wired talk-back extension (16 way, flush-type, gooseneck microphone)	YDF-16QM	IP22

Module	Product Name	Model	Environment
	Marine wired talk-back extension (16 way, wall mounted, gooseneck microphone)	YDF-16GM	IP44
	Marine wired talk-back extension (16 way, wall mounted, head mounted)	YDF-16GT	IP44
	Marine wired talk-back extension (16 way, weatherproof head, mounted)	YDF-16FT	IP56
	Marine wired talk-back extension (16-way, weatherproof, handheld microphone)	YDF-16FS	IP56
	Marine wired talk-back extension (flush-type, handheld microphone)	YDF-1QS	IP22
	Marine wired talk-back extension (wall mounted, handheld microphone)	YDF-1GS	IP44
	Marine wired talk-back extension (flush-type, gooseneck microphone)	YDF-1QM	IP22
	Marine wired talk-back extension (wall mounted, gooseneck microphone)	YDF-1GM	IP44
	Marine wired talk-back extension (wall mounted, head mounted)	YDF-1GT	IP44
	Marine wired talk-back extension (weather resistant headset)	YDF-1FT	IP56
	Marine wired talk-back extension (weatherproof handheld microphone)	YDF-1FS	IP56
	Switching module	YDF-ZJ	IP44
	Ex-proof pa remote control station	YKG-1/2E	IP44
	Safety grid transfer box	AQZ-1	IP44
Marine loudspeakers	Marine loudspeaker (5w)	YHC5-1	IP56
	Marine loudspeaker (10w)	YHC10-1	IP56
	Marine loudspeaker (15w)	YHC15-1	IP56
	Marine loudspeaker (25w)	YHC25-1	IP56
	Marine loudspeaker (50w)	YHC50-1	IP56
	Explosion-proof loudspeaker	YHE-*	IP56
Power box	Power box (stuffing box)	DF-7	IP44
	Power box (waist shaped hole)	DF-7	IP22
Distribution box	Distribution box (waist shaped hole)	12FX-6	IP22
	Distribution box (stuffing box)	12FX-6	IP44

[1)] Modules applied may vary based on requirements for individual installations.

Application/Limitation

- The Marine wired Talk-back system is to be installed according to manufacturer's documentation.
- Any Ex-equipment (equipment to be used in areas with explosive atmosphere) listed in this certificate are subject to separate Ex- approvals.

Type Approval documentation

DNV No	Document ID	Rev.	Description
19	TAA00002XG	2023-11-13	Certificate: DNV, Type Approval certificate for PAGA and Talk Back System incl. YHC-series speakers
18	J24-020-ZC	2024-11-29	Report: SiTiiAS, Conducted low frequency and Compass Safe Distance test report for Marine Wired Talk Back System
17	HY-Q2024112601	2024-11-26	Report: Hangzhouhuayan Digital Electron Co, Marine wired talk-back system inspection report
16	K0024090300678-E2	E2	Report: Zhejiang Kezheng, EMC and environmental test report for Marine wired talk-back system
14	0HY.304.127 and 3HY.934.453	2024-09-13	Drawing: Hangzhou Huayan, Ex Proof PA remote control stations YKG-1/2E
5	0HY.466.665	A/0	Manual: Hangzhou Huayan Digital Electron Co, Marine wired talk-Back system, Product Instructions
3	2HY.971.214	2024-06-25	Drawing: Hangzhou Huayan Digital Electron Co, Wiring diagram of Marine wired talk-Back system
2		2024-06-26	Drawing: Hangzhou Huayan Digital Electron Co, Marine wired talk-back outline drawing, General Assembly drawing

1		1.0	Drawings: Hangzhou Huayan, Submission of Material for Review, Marine Wired Talk-Back System

Tests carried out

- Environmental testing: DNV-CG-0339 (2021)
- Performance testing: Functional tests according to DNV Type Approval programme 848.26

Marking of product

The Manufacturer and Type Designation to be applied to the equipment in a clearly visible location. In addition, the equipment shall be marked with serial number, reference to Type Approval certificate, safe distance to magnetic compass, power consumption and/or supply voltage.

Periodical assessment

Periodical assessment is to be performed after 2 years and after 3.5 years. A renewal assessment will be performed at renewal of the certificate.
The scope of the periodical/renewal assessment is to verify that the production quality conditions stipulated for the type approval are complied with and that no alterations are made to the product design or its components and/or materials without appraisal by the Society.

This certificate is only valid if required periodical assessments are carried out with satisfactory results. To check the validity of this certificate, please look it up in https://approvalfinder.dnv.com

Manufactured by

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