



Voyage Data Recorder

JCY-1800



- Compact flashcard: no moving parts
- Easy IP based maintenance
- External recording on PC: 180GB for 60 days
- User-friendly real-time playback software
- Global service network



Japan Radio Co., Ltd.

JCY-1800 Voyage Data Recorder

The JCY-1800 Voyage Data recorder (VDR) is a so-called black box which complies with IMO, MSC A861(20) performance standard according to IMO, recording navigational information, bridge conversation and VHF communication. The recorded data is used to analyze causes of an accident such as collision, grounding or sinking. The SOLAS obligates to carry VDR for all New building cargo ships and passenger ships over 3,000GT.

© **Carriage Requirement**
Over 3,000GT, International Voyage Cargo ships
and Passenger ships

JCY-1800 Reliability

JRC's second generation VDR incorporates the latest technology to aid a safe nautical future.



In-house technology

JRC uses self fabricated reliable, marinised hard-ware, purposely designed for the VDR. The non PC-based equipment ensures spare parts availability for many years.

Dedicated industrial OS

A reliable platform is created by using an optimized operating system. The dedicated software guarantees a stable environment.

World-wide support

JRC gives continuous support through its offices and network of fully trained agents around the world.

L3 capsule

L3 is one of the main suppliers of flight recorders to the aircraft industry. They have proven themselves in the VDR market and are the worldwide leader. L3 delivers one of the smallest and lightest VDR capsules in the market.

JCY-1800 performance feature

The protective capsule of JCY-1800 can record the data 12 hours at least.

The recorded data can be checked easily by the playback-software on the user PC according to IMO, SN Circular 246.



Space saving black-box design

Mount the black-box at a convenient location to make all necessary interfacing. The separate operation panel can be located on the bridge for easy-access to status and alarm information.

Playback-software

JRC includes playback-software that also incorporates real time monitoring functionality on the user PC.

The acquisitioned data can be displayed as both graphical and numerical.

Standard CSV data conversion enables easy and efficient exchange of information to shore, e.g. by e-mail.

External recording

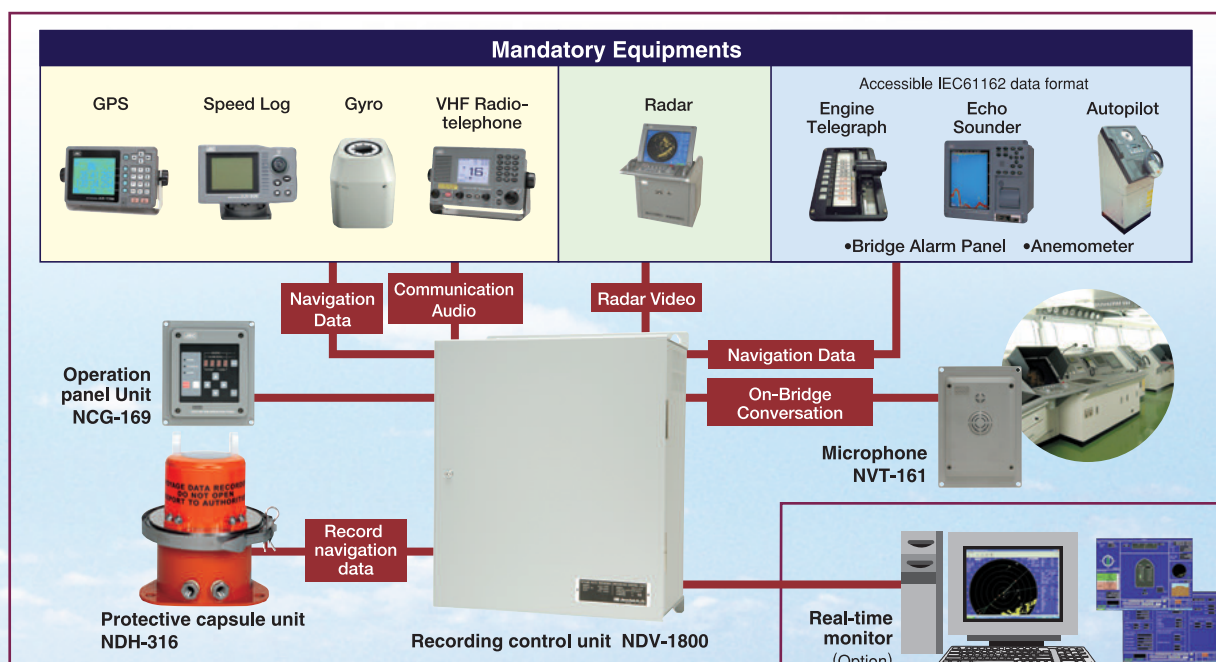
Standard LAN output enables you to connect up to 4 different PC's by use of a hub. All VDR data, including radar video, can be stored on these PC's. 3GB storage capacity per day is required if you would like to save the data on your computer. This gives you the possibility to easily playback, select and send data.

Remote Diagnosis Server

The VDR remote data diagnosis server with IP-routing technology monitors the latest condition of navigation and radio communication equipment onboard.

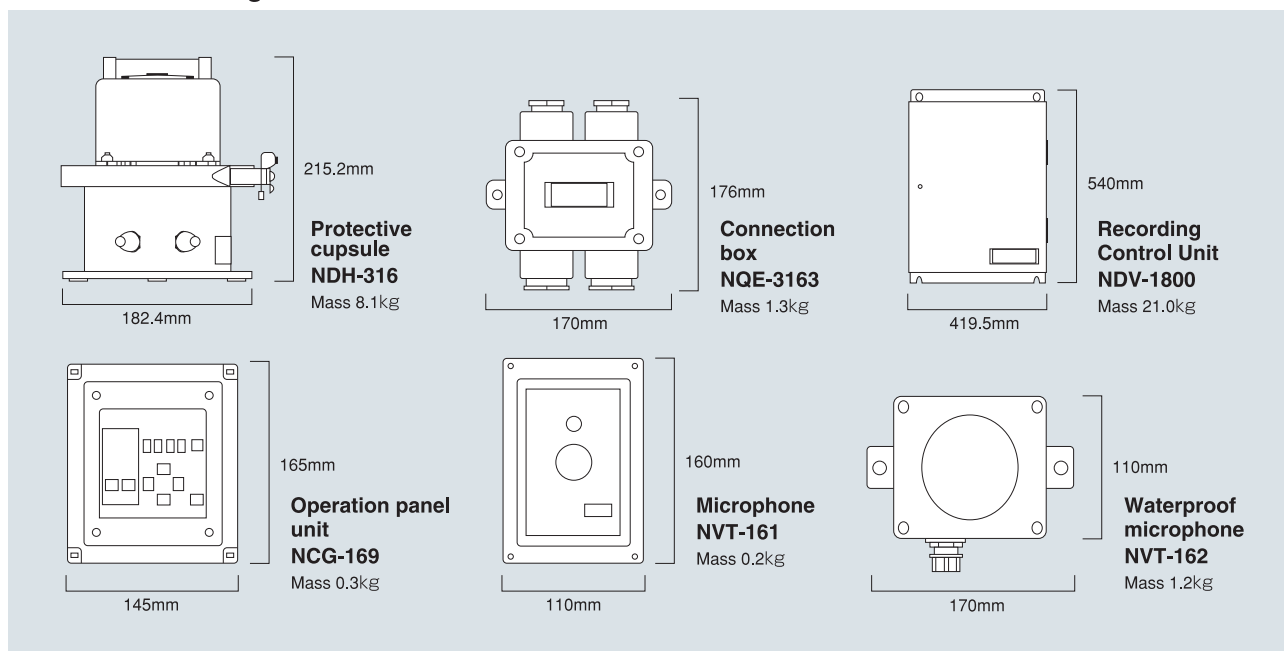
This high-end technology allows solution of total cost reduction & time-saving feature for your crew members to monitor the latest conditions, as well as establish contact with a ship in need of attention increased service performance by precise failure prediction & analysis to reduction of down time.

◎System Configuration



JCY-1800 specifications

Dimension Drawings



Internation requirements	
IMO A861 (20)、IEC61996、IEC60945, etc.	
Protective capsule	
Recording data	date & time, ship's position, speed, heading, bridge communications, Radar Image, VHF Audio, under keel clearance, bridge main alarms, rudder order/response, engine order/response, water,- fire-tight door status, hull opening status, accelerations and hull stresses, wind speed/directions, etc.
Recording data stream	minimum continuous 12-hour data
Data recording interval	radar image :15-sec interval
Data hold interval	over 2 years when un-powered
Environmental condition	fire : 1100℃ for 1-hour, 260℃ for 10-hours - deep-sea pressure : 60 Mpa (equivalent to 6000 m) for 24-hours, etc.
Input ports for sensor connecting	
Mic audio	9 ports
VHF audio	3 ports
IEC61162-1&2	16 ports
NSK	sync/step/pulse unit
Radar (option)	RGB
Analogue (option)	32 ports max.
Contact (option)	256 ports max.
System input voltage	
AC100 / 110 / 115 / 120 / 220 / 240 V	

Standard Components

Unit	Model	Q'ty
Protective capsule unit	NDH-316	1
Connection box	NQE-3163	1
Recording control unit	NDV-1800	1
Operation panel Unit	NCG-169	1
Microphone	NVT-161	3
Spare parts	7ZXJD0080	1
Playback software	CYC-315 (For Investigator)	1
Playback software	CYC-316 (For Operator)	1

Optional Components

Unit	Model	Q'ty
Waterproof microphone	NVT-162	1
Frame grabber board kit (For Radar video)	7ZZJD0052	1
Second video channel kit (For Radar video)	7ZZJD0055	1
Armoured LAN cable (Waterproof type)	7ZCAF0200	30m

• Specifications may be subject to change without notice.

For further information, contact:



Since 1915

Japan Radio Co., Ltd.

URL <http://www.jrc.co.jp/eng/>

Main Office: Fujisawa bldg. 30-16, Ogikubo 4-chome
Suginami-ku, Tokyo 167-8540, Japan
Telephone: +81-3-6832-1816
Facsimile: +81-3-6832-1845

Overseas Branches : Seattle, Amsterdam, Athens, Manila
Liaison Offices : Taipei, Jakarta, Singapore, Hanoi,
Hamburg, New York