



ALPHATRON
Marine



Voyage Data Recorder

Inland VDR

Long term performance and reliability

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Proven black box design, hardware for mariners

The heart of the VDR is the recording control unit, which controls and manages all sensor, audio and image interface inputs and outputs.



- Operation panel unit (7-inch display)
- Playback/realtime monitoring software
- X- and S-band radar, ECDIS via LAN (option RGB)
- Sensor data serial/LAN (option analog/dry contact)
- VHF and (waterproof) microphone audio (optional)
- Fixed or float free capsule (optional)

Various networks are available including VDR network control for connected capsules and the operation panel, which is also used by authorities to retrieve any necessary data following an incident. In addition, the special JRC network can be connected to JRC's Multi Function Display and user network for real time monitoring.

There is also an internal UPS included as standard, which is able to power the VDR for two hours in case of power failure. During blackout only bridge audio is recorded and will automatically return to normal condition after power is restored.


2 hours

System operation, on a 7-inch display

Newly designed 7-inch color LCD touch display which allows full system operation. Displaying various VDR alerts with detailed information, see what sensors are connected including status, view the latest recorded image data of radar and ECDIS and playback of audio tracks recorded from microphones.

System setup on the new operation panel unit displays currently installed software version, performance test results, and even allows you to see actual operating lifetime of parts that need regular replacements. For example, knowing the status of the capsule battery and the fan in the recording control unit enables in-service replacement in a timely manner without causing downtime or interfering with the vessels' already busy and expensive schedule. The USB port on the front of the display allows copying of data from the VDR.



The 7-inch wide display has allowed JRC engineers to develop an exciting new software approach that offers simple-to-use icons, based upon JRC's experience with simple menus and dedicated functions, inspired by our innovative Multi Function Display (MFD). JRC carries forward the design and presentation elements within our own distinctive and visual style to this small operation panel, which can clearly be seen to be within the JRC family of products. Developed with our own built-in quality that ship owners, managers and maritime administrations have long relied upon from JRC.



Playback, ideal for crew training

JRC includes intuitive playback-software that incorporates real-time monitoring functionality on the user PC. The data acquired can be displayed in both graphical and numerical format. Standard CSV (Comma Separated Values) data conversion enables easy and efficient exchange of information to shore e.g. via email. In addition, the playback-software is an ideal tool for crew training. Its ease of use and the freedom to survey a range of scenarios enhances the user's navigation skills.

Playback software supports Windows XP, Vista, 7, 8.

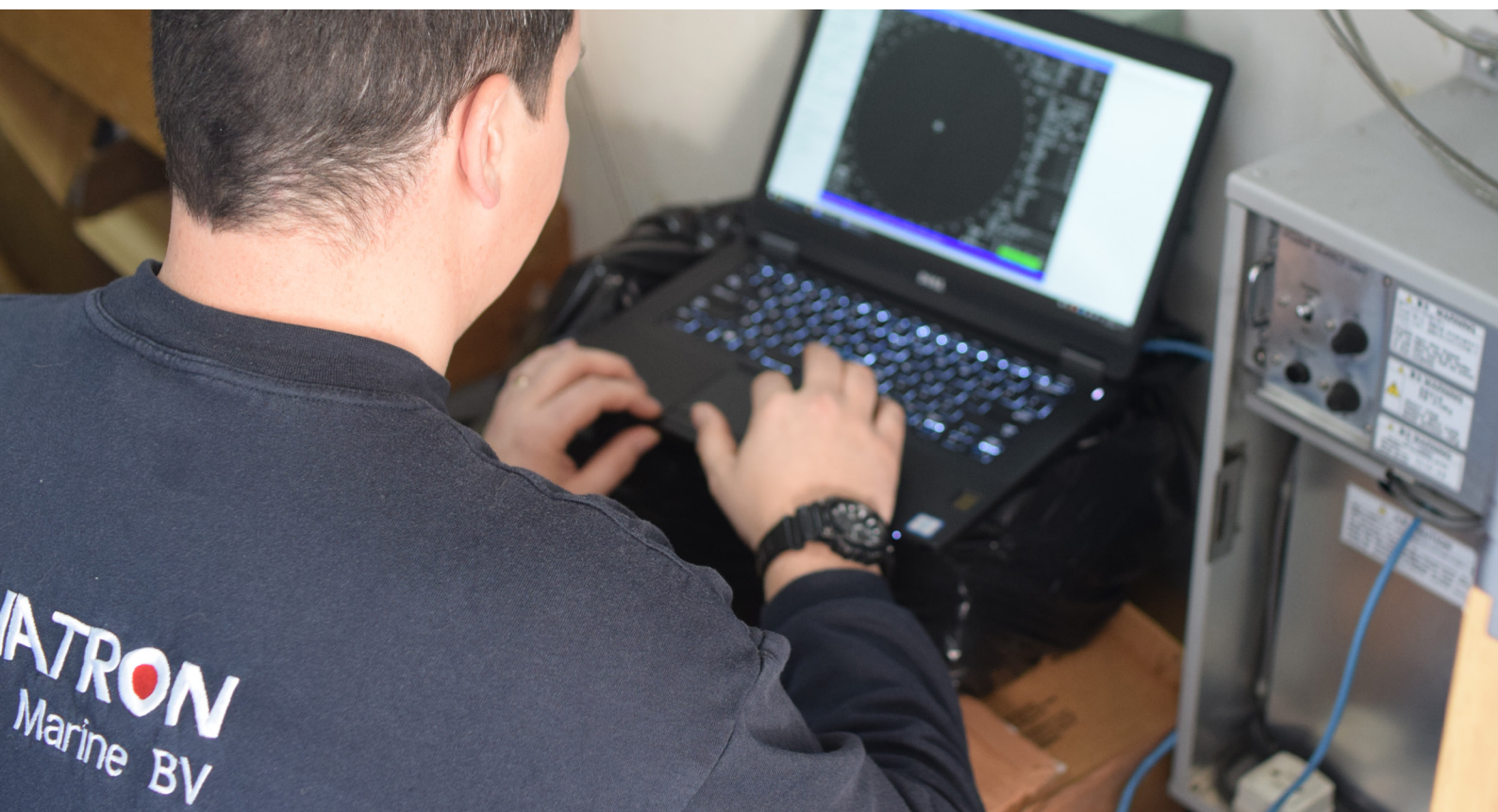
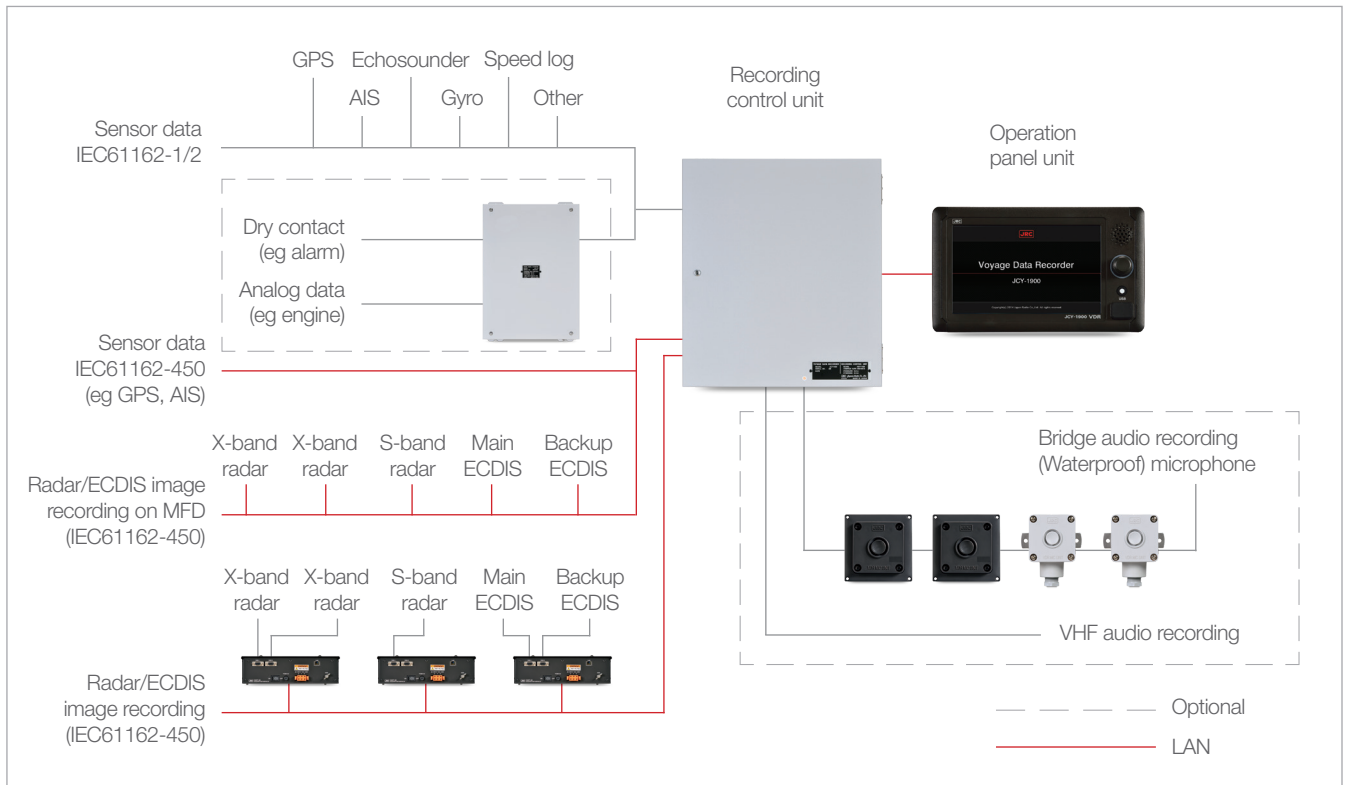
Remote maintenance, closer to you than ever



The new JRC VDR has a dedicated server integrated as standard to support our JRC proprietary Remote Maintenance System (RMS) using IP-routing technology to monitor status of navigation and radio communication equipment onboard, via JRC's FB or GX Inmarsat satellite communications systems, to establish a highly secure connection data link to the vessel. This allows a cost-effective determination of the operating status, software version numbers installed, etc., of the JRC equipment onboard whilst the vessel is at sea. Being able to diagnose a problem remotely, accurately, reliably and quickly, allows the ship owner to save one of the most precious commodities, time. JRC can make preparations at the next port for the necessary repair work, dramatically increasing the return to work status, using our comprehensive and well-trained global support network.

System diagram

The VDR can be connected to various navigation and communication equipment and sensors onboard a ship. JRC's straightforward configuration assures continuous performance of the VDR system.



Tech Specs

Operation panel unit RoHS

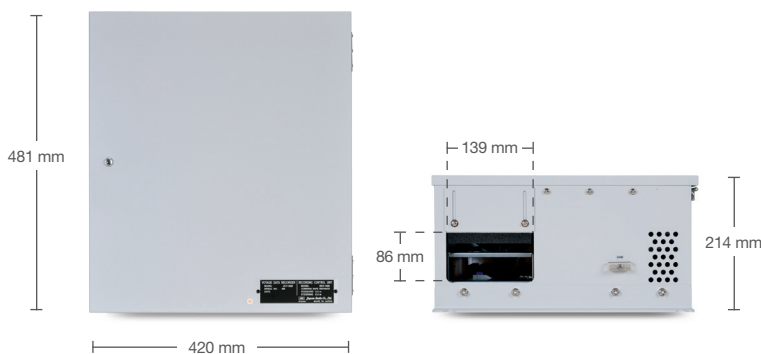
NCG-1900 Weight 800 g



7-inch LCD color display
800 by 480 pixels
Built in speaker
Touch + rotate and push button
USB (copying of data)
Temperature: -15° to 55°C
Power from NDV-1900

Recording control unit RoHS

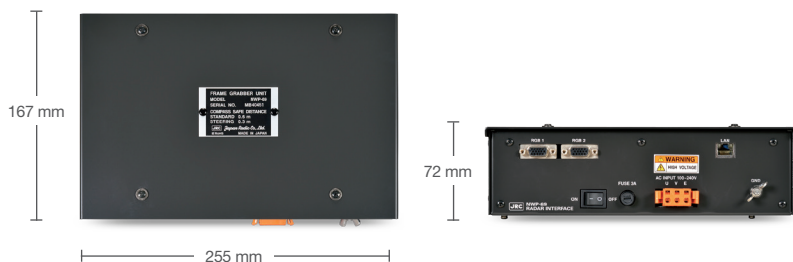
NDV-1900 Weight 22.5 kg



Up to 48 channel IEC61162
-1 (22ch), -2 (2ch), -450 (24 sensors)
Microphone 12 ch (6 tracks)
VHF 4 ch (2 tracks)
Image 6 ch (ECDIS, X & S radar)
512GB SS drive (720hr record)
Power 100V to 240V AC (230VA)

Frame grabber board/RGB unit *optional* RoHS

NWP-69 Weight 1.5 kg

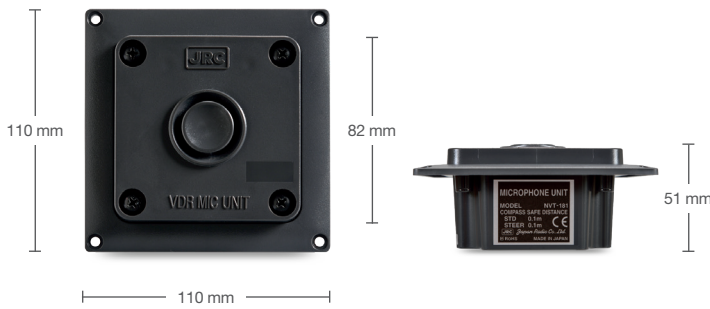


2 video channel input
Analog RGB/Hs/Vs
Up to 1920 by 1200 pixels
Record interval 15sec/image
Output to NDV-1900 via LAN
Refresh rate 60 to 85 Hz
Power 100V to 240V AC (15VA)

Tech Specs

Microphone *optional* RoHS

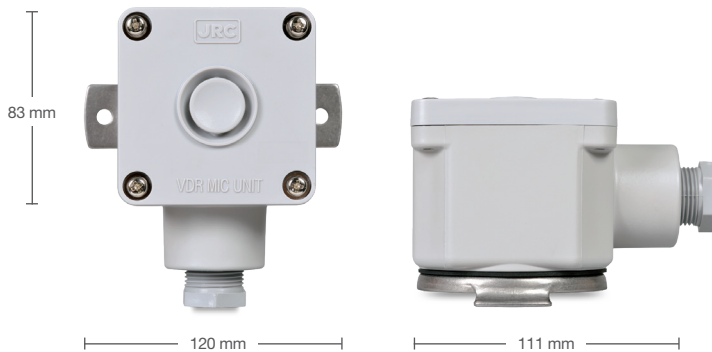
NVT-181 Weight 200 g



Flush mount installation
Range receive radius 3.5m
Built-in speaker for audio test
Temperature: -15° to 55°C
Protection rate: IP22
Compass safety distance 0.1m
Power from NDV-1900

Waterproof microphone *optional* RoHS

NVT-182 Weight 500 g



Wall mount installation
Range receive radius 3.5m
Built-in speaker for audio test
Temperature: -25° to 55°C
Protection rate: IP56
Compass safety distance 0.1m
Power from NDV-1900

In the box

Operation panel unit	NCG-1900
Recording control unit	NDV-1900
Battery pack	CBN-80
Playback software	CYC-825
Real time monitoring	CYC-826
Spare parts	

Options

Microphone	NVT-181
Waterproof microphone	NVT-182
Digital signal convertor (32)	NCT-82
Digital signal convertor (64)	NCT-83
Data acquisition unit	NCT-84
Analog-Digital convertor	CEF-60
Frame grabber board	NWP-69
Microphones (3x)	NVT-181



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