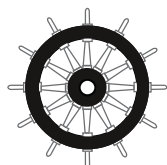


Doppler Speed Log

JLN-740 Series

JRC



Highly accurate speed and distance log for high-mileage trips.

- IMO MSC.96 (72)-compliant Doppler Speed Log; compatible with ships above 300 GT.
- Measures ship speeds within a range of 0.03kn or 0.3%* with greatly improved ship speed tracking to assist with precise navigation during berthing.
- Equipped with proprietary bubble detection, which informs when speed detection is reduced due to bubble contact.
- Color LCD display model with touch panel for improved night visibility is also available.
- Also available in a three-unit model, which provides smaller ships with the same exceptional speed tracking capability.

*: At fixed speeds (measured value).

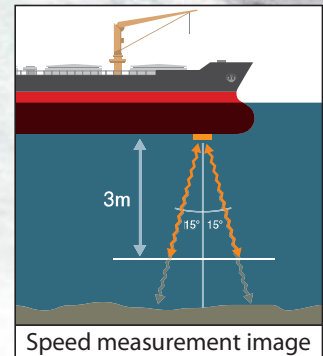
Features

The JLN-740 series is a Doppler Speed Log compliant with the IMO MSC.96 (72) standard, required on all internationally-voyaging ships exceeding 300 GT. Boasting never-before-seen accuracy for speed measurement, the JLN-740 is also installed with our company's proprietary bubble detection, which informs you when measurement accuracy is impaired due to air bubble contact. A model featuring color LCD touch panels for the main and sub displays, allowing you to view important information and adjust brightness in all displays from one location, is also available.

Precise Ship Speed Tracking

The JLN-740 series utilizes digital signal processing, which, coupled with optimizations to existing speed measurement waveforms and the reliability of ship bottom mounting, has resulted in water speed measurement with accuracy up to 0.03kn or 0.3% in all models* 1. That accuracy of information allows for highly fuel-efficient speeds, which means faster voyages with less waste. Along with improved speed measurements, the series also has greatly improved ship speed tracking, relaying all the information you need for precise navigation during berthing.

* 1 : At fixed speeds (measured value).



Bubble Detection

A long-unsolvable problem with doppler-based water speed measuring systems was reduced accuracy from bubbles making contact with the measuring device on the bottom of the vessel. The JLN-740 series detects when bubbles contact the transducer, and - using proprietary technology from JRC - alerts you of reduced measuring accuracy via the display. Confirming the source of the issue typically requires visually examining the device on the bottom of the ship. However, onboard air bubble detection allows you to skip unnecessary preventive maintenance.

Performance Standard Compliant

The JLN-740 series is compliant with the IMO MSC.96 (72), A.824 (19), and A.694 (17) standards, required on all internationally-voyaging vessels exceeding 300 GT, and meets standards for the following IEC environmental test standards:

- | | |
|---|------------------------|
| ● MARITIME NAVIGATION AND RADIOCOMMUNICATION EQUIPMENT AND SYSTEMS | IEC 60945 (2002) |
| ● Marine speed and distance measuring equipment (SDME) | IEC 61023 (2007) |
| ● Presentation of navigation-related information on shipborne navigational displays | IEC 62288 (2014) |
| ● Digital interfaces-Single talker and multiple listeners | IEC61162-1 (2010) |
| ● Digital interfaces-Ethernet interconnection | IEC61162-450 (2011)* 2 |

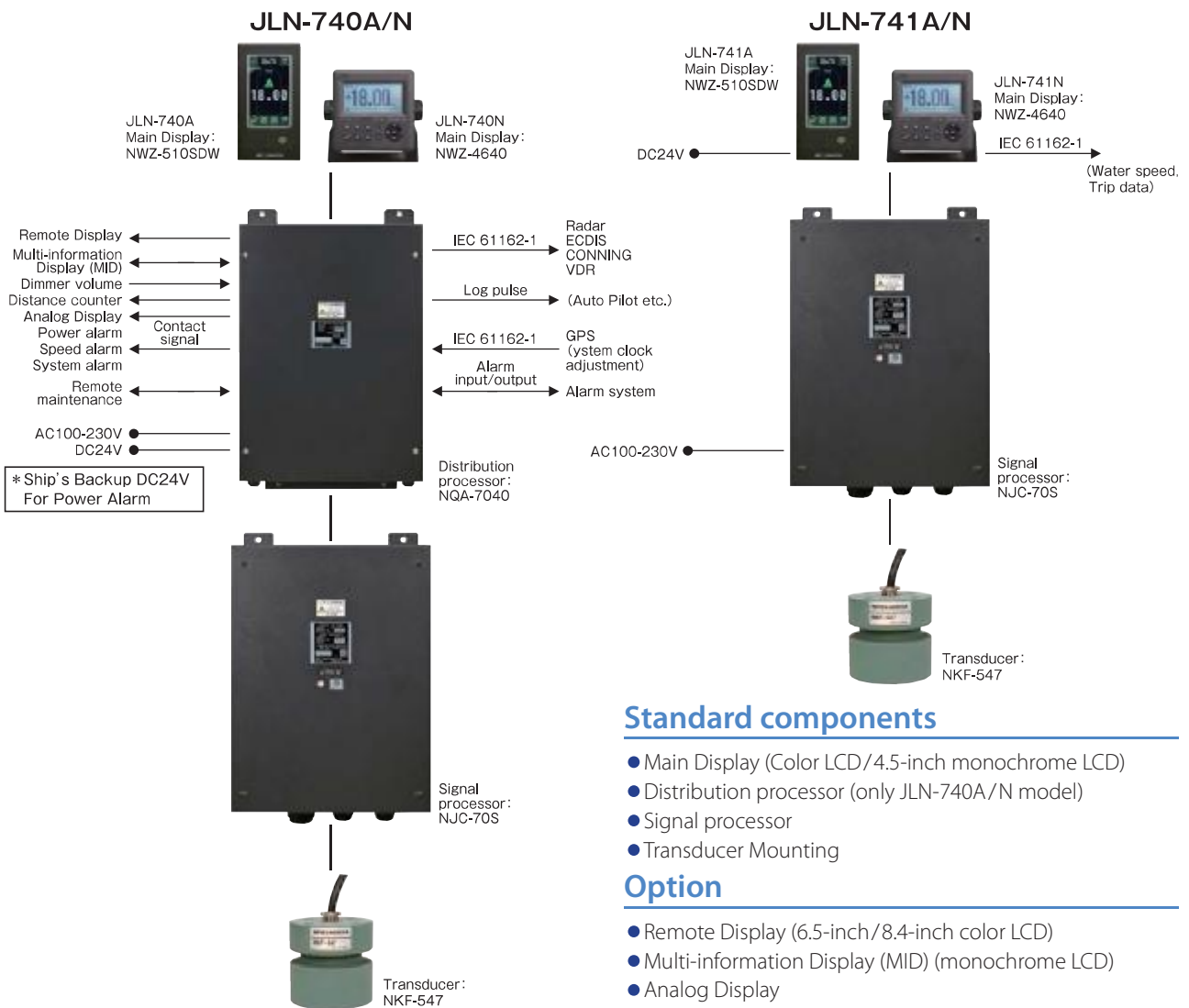
In addition, when used with JRC's Satellite Log JLN-720, ships exceeding 50,000 GT can meet the requirements for IMO MSC.334 (90).

* 2 : Only supports JLN-740A/N

4 Models to Choose From

- Displays : Two types, color LCD display with a design identical to the Satellite Log JLN-720, and the Black and white display based on the NWZ-4610.
 - * The color LCD display provides the high-visibility and the operability of the JLN-720.
 - Unit compositions : 2 types, four-unit and three-unit versions.
 - *The four-unit composition is appropriate for large ships needing share of data such as radar and ECDIS to navigation equipment.
 - *The three-unit composition is appropriate for small ships.
- A total of 4 combinations can be selected from depending on the required use.

System diagram



Standard components

- Main Display (Color LCD/4.5-inch monochrome LCD)
- Distribution processor (only JLN-740A/N model)
- Signal processor
- Transducer Mounting

Option

- Remote Display (6.5-inch/8.4-inch color LCD)
- Multi-information Display (MID) (monochrome LCD)
- Analog Display
- Distance Counter
- Dimmer Unit
- Gate valve type Transducer Mounting



Remote Maintenance System (RMS)-compatible

The JLN-740 series is compatible with JRC's proprietary Remote Maintenance System (RMS), which uses JRC's VDR and satellite communications to remotely link to the equipment onboard the vessel to perform remote diagnostics and preventive maintenance. For more information on RMS, please contact JRC's business department.

Specification

Name	DOPPLER LOG			
Model	JLN-740A	JLN-740N	JLN-741A	JLN-741N
IMO approved	✓			
Operating system	Dual-beam pulse Doppler system			
Operation frequency	2MHz			
Measurement scale	-10.00 ~ 40.00kn			
Sailing display range	Model A:0 ~ 999999.99NM, Model N:0 ~ 99999.99NM (NWW-7: to 9999.99NM with Distance Counter)			
Water speed	3.0 m deeper than the transducer surface			
Ship speed accuracy	1 % of the speed of the ship, or 0,1 kn whichever is greater			
Total distance accuracy	1 % of the distance run by the ship in 1 h or 0,1 nautical miles in each hour whichever is the greater.			
Speed indication	kn or m/s			
Display	Touch panel 5.1 inch-LCD (480x800 pixels)	4.5inch monochrome LCD	Touch panel 5.1 inch-LCD (480x800 pixels)	4.5inch monochrome LCD
Input interface (IEC-61162-1)	GPS:RMC, ZDA (clock adjustment)		—	
Signal output	8 ports NMEA0183 Ver1.5、2.1、2.3、4.0 or IEC61162-1: VBW,VLW		2 ports IEC61162-1: VBW,VLW	1 ports IEC61162-1: VBW,VLW
I/O interface	Analog display:2 ports		—	
	Log puls:2 ports (Photocoupler signal 200pulse/NM, Max. 30V, 10mA)		—	
	Distance Counter (NWW-7):1 port		—	
	Remote Display (NWW-650SDR/NWZ-840SDR), Multi Information Display (NWW-4610):Total 2 ports		—	
	LAN I/O for RMS:1 ports		—	
	Alarm (Power・Speed・System) output:1 port each		—	
	Serial I/O for alarm:1 port		—	
	Dimmer: serial I/O:1 port・Analog Input:1 port		—	
Power supply voltage	AC100/230V (±10%)			
Power consumption	AC100V:50W (60VA) Less than、AC230V:50W (150VA) Less than			
Environmental requirements (excl. transducer)	Temperature range:-15 ~ 55°C (operating) Relative humidity:0 ~ 93% (non condensing)			

Dimensions

Main Display (Color LCD)

NWZ-510SDW
Mass: Approx. 1.2kg



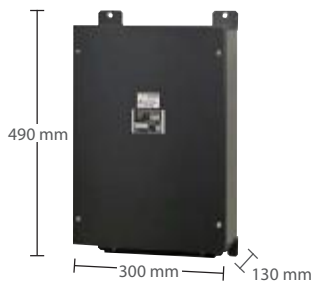
Main Display (Multi Information Display)

NWZ-4640
Mass: Approx. 0.8kg



Distribution processor (only 740A/N)

NQA-7040 Mass: Approx. 6.0kg



Signal processor

NJC-705 Mass: Approx. 5.5kg



Transducer

NKF-547 Mass: Approx. 17kg



• Specifications may be subject to change without notice.

For further information, contact:



Since 1915

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ISO9001, ISO14001 Certified