



ALPHATRON  
Marine



# JLN-720

Accurate ship speed and distance

[www.jrc.am](http://www.jrc.am)

# Features

The JLN-720 satellite log provides accurate ship speed and distance right with your fingertip operation. Regardless of weather conditions, the system is capable of providing accurate speed up to an amazing 0.02kn or 0.2% all over the world using JRC's proven GPS compass technology. On the bridge the system is operated on a color LCD display with touch panel, providing clear and straightforward information.



- Highly accurate speed measurement
- Color touch display
- Triaxial vessel speed calculation
- Intuitive operation
- Advanced interfacing
- Various accessories available
- Various remote displays
- Supports remote maintenance
- BAM compliant alert handling
- Unified design



The system complies with IEC61023 (Ed.3) and SDME standards for ships of 50.000GT and greater.

## Advanced sensor

The processor is built into the antenna which eliminates alignment between antenna and processor, therefore contributing to an easy setup with less error and significantly reduced installation time. This concept also reduces the installation costs as only a single cable is used between antenna and processor unit. Should something interfere with the coverage, the proven antenna design incorporates a layer of air that reduces possible blind spots, allowing for a more precise speed than conventional systems.



# Touch operation

With just one physical power button, the 5-inch color main display and 6.5 and 8.4-inch for the remote displays are operated by touch operation. The touch screens can be easily read during daylight but also in darkness, with excellent clarity, even when viewed from a wide angle. All displays feature dimmable backlighting from 0 to 100% and have theme-option (day, dusk and night) available from the menu.

The JLN-720 displays are identical to the AlphaLine Repeater which have not only been developed to function as individual products, but truly are part of our renowned total AlphaBridge concept. Needless to say, the graphical user interface is logical, easy to use and consistent throughout. All displays are designed for the industrial environment found on board of ships, ensuring years of problem free operation.



# Measuring

The JLN-720 satellite log is a system to measure speed over the ground by using the signals from GPS satellites. Using a GPS compass sensor mounted on the vessel, the speed is measured in three directions. Offering transverse speed at bow and stern along with longitudinal speed, ROT and total/trip distance is measured with the satellite signals.



NMEA formats



## Interfacing

The processor of the JLN-720 has been built to last and incorporates a highly reliable interfacing field. You can easily connect a wide range of additional equipment to optimize your configuration. Remote displays, digital and analog indicators, dimmers and distance counters are just a few of the possibilities. This equipment can output VBW (vessel speed information), VLW (sailing distance information) and VTG (course and speed information) in various industry standard NMEA formats and versions.

## Alerts

The JLN-720 satellite log includes a total of 18 alerts. These various alarms and warnings such as GPS, gyro and distance calculations failure are supported through contacts and RS-422. You can even set a threshold value of vessel speed alarm individually, for both forward and backward direction.

When an alert occurs, the alert icon will be shown at the top and once you touch the icon, an alert content bar will be displayed. You can acknowledge the alert by tapping on the alert message.



Alert icon

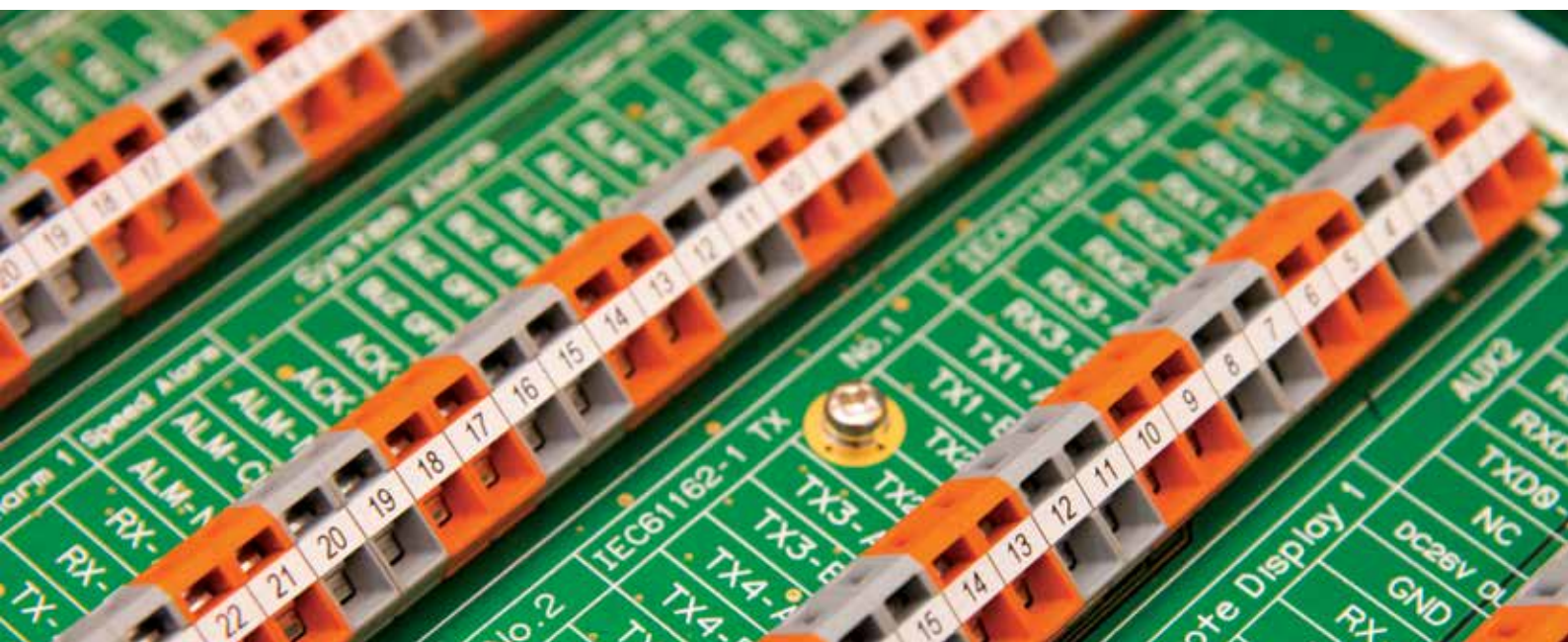


Alert content bar

# Remote support

RMS

The JLN-720 supports the JRC original Remote Maintenance System (RMS), one of the core elements of JRC's customer operations support philosophy. With the VDR connected through LAN, the JLN-720 satellite log can be monitored from shore using JRC's FB or GX satellite communications system. This allows a cost-effective determination of the operating status, software version installed but also firmware can also be updated through j-Marine Cloud.



## Snap on mounting

Our standard main touch screen display and two remote displays feature our famous and unique snap on flush mount system, making it possible to fit the display without tools. After cutting a hole that fits the mounting frame, the display can easily be pushed into the frame and kept in position by a click/spring system. As a result, a minimal amount of screws or mounting bolts are visible and allows for easy maintenance.

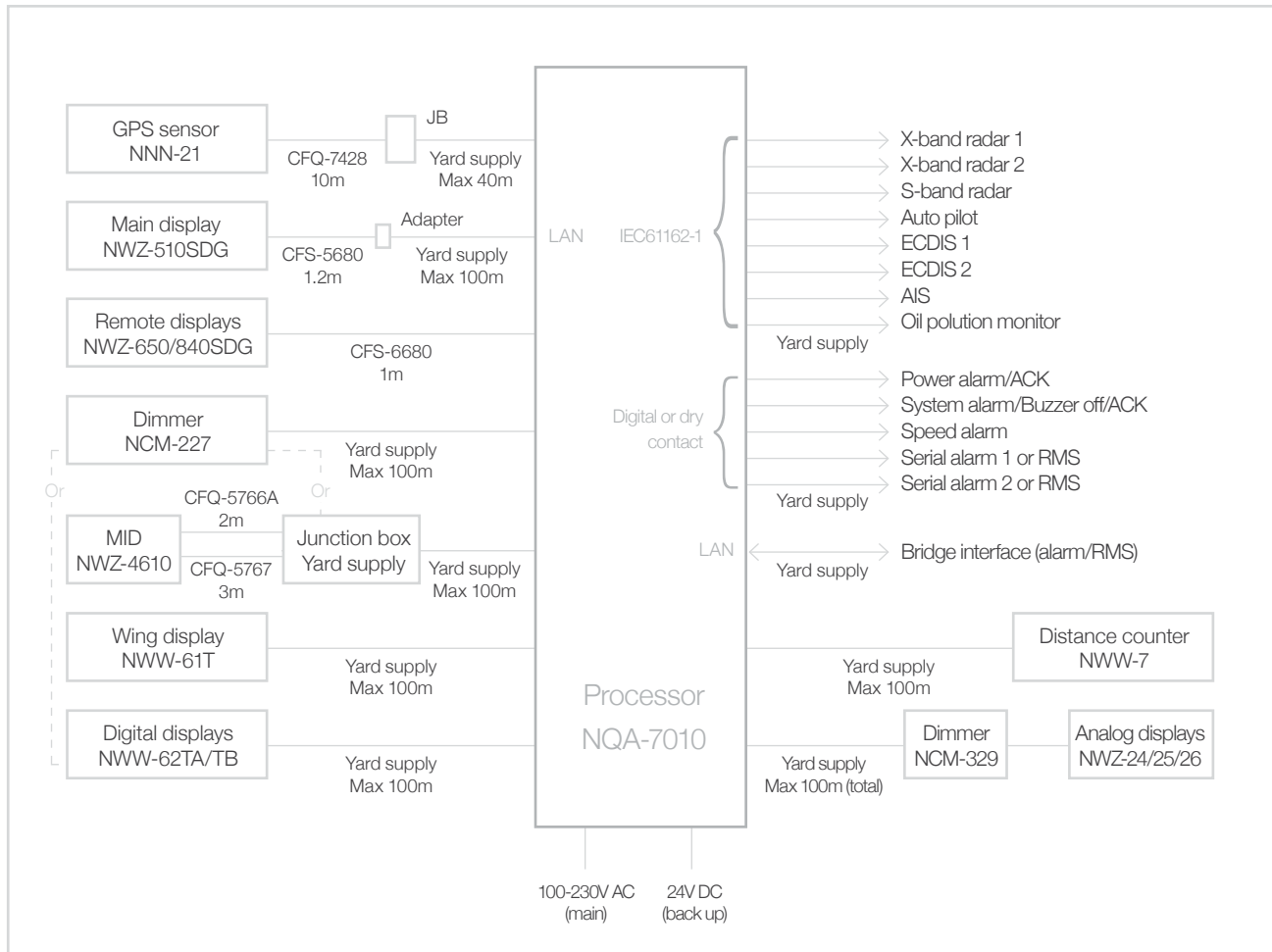
## Back up power

When an AC power failure occurs, the JLN-720 outputs an alert and inputs the corresponding acknowledgment ACK through dedicated contacts. This process is realized by hardware and is not dependent on software and is being supported when 24V DC is connected.



# System diagram

The JLN-720 satellite log can be connected to various equipment and sensors onboard a ship. JRC's straightforward configuration assures continuous performance.



## In the box

- Main display NWZ-510SDG
- GPS compass sensor NNN-21
- Processor NQA-7010
- Data cable 10m CFQ-7248
- Power/data cable 1.2m CFS-5680
- LAN connector (10 pcs) ADT-STP-10
- LAN modular cover (10 pcs) ADT-MC7L
- Spare parts 7ZXNA3004
- Instruction manual 7ZPNA3206

## Accessories

- 6.5-inch remote display NWZ-650SDR
- 8.4-inch remote display NWZ-840SDR
- Dimmer NCM-227/329
- Multi Info Display (MID) NWZ-4610
- Waterproof wing display NWW-61T
- Digital display NWW-62TA/TB
- Distance counter NWW-7
- Analog display NWW-24/25/26
- Junction box GPS compass NQE-7720

# Tech Specs

## Main display

NWZ-510SDG Weight 0.75 kg (1.65 lbs)



5-inch touch display  
480-by-800-pixel resolution  
Vertical orientation  
450 cd/m2 max brightness  
View angle (H/V) 170°  
Panel cutout 90x160 mm  
Power 24V DC, 8W

## GPS compass sensor

JLR-21 Weight 5.9 kg (13 lbs)



Multichannel 12ch+SBAS 1ch  
Accurate up to 0.02kn or 0.2%  
Tracking rate of turn 45°/sec  
Tracking acceleration 1G  
Temperature -25 to 55°C  
Protection level IP56  
Power consumption 4W

## Processor

NQA-7010 Weight 11 kg (24.25 lbs)



IEC61162-1 3x input, 8x output  
Analog 2x output  
Dimmer 1x input  
Contact 2x input, 3x output  
Distance counter pulse 1x output  
Serial dimmer/alert 1x/1x in/output  
Power 100-230V AC, 100W



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