JLR-7500/JLR-7800

(D)GPS navigator

– the new (D)GPS navigator has the same look and feel as JRC’s unified designed products

5.7-inch high visibility display
Great Circle and Rhumb line in the same route
Various display modes available
Advanced port configuration
LAN for route data transfer and interswitching
(D)GPS navigator – performance features

Unique features
- The new JLR-7500/JLR-7800 (D)GPS navigator will locate your position accurately and gives you a wide range of possibilities – integrated with the latest technologies – that will enhance your operational performance.

3D highway
One of the new display modes is the 3D highway, which allows you to intuitively view the location of the next waypoint. This 3D guidance is particularly valuable to follow a real-time chain of waypoints along a planned route.

Smart route calculation
The new (D)GPS navigator allows you to plan long distance routes highly effective. It is possible to set Rhumb lines (RL) for short legs, while Great Circle (GC) can be set for the long distance legs – all possible within the same route. Simply make your selection for each leg to reach your destination effortlessly.

Display modes
All information is displayed on a highly visible 5.7-inch LCD display, featuring added sharpness and contrast compared to the previous version. Many display modes are readily available and selectable from the menu, such as navigation, CDI, highway, track plotting and service and information screens. The display has four dim modes, allowing adjusting at your own convenience.

Satellite integrity check
The newly developed sensors includes RAIM, which is to access the integrity of GPS signals. If multiple satellite signals are picked up, this system will check if the position fix is consistent with the computed position, assuring higher reliability than conventional methods.
(D)GPS navigator – developed for maximum ease of use

Unified design
The new display design allows you to carry out all operations simply by using the unified keyboard layout. The keyboard is solid and responsive, which allows for precise operation.

The keys are also backlit, making it easy to operate in low-light settings on the bridge.

Simple operation
The compact design of the JLR-7500/JLR-7800 incorporates a new intuitive interface, providing enhanced ergonomics and user friendliness. The logic of the controls and excellent on-screen menus will greatly shorten most users’ learning period.

Key in data
With the new (D)GPS navigator, entering data is just as simple as creating a (SMS) text message on your phone. The consistency in the keyboard layout allows entering waypoint data fast and in a natural way.

JRC StarNetwork™
JRC has been providing sales and support of products since 1915. Today, JRC offers comprehensive assistance through its organisation, in partnership with a worldwide StarNetwork™ of over 270 fully trained and qualified partners and agents, assisting you 24 hours a day, 7 days a week and 365 days a year.

JRC one-call™
One number to call
With JRC you can go anywhere and if you need our support, simply call us at +81 3 3492 9201, anytime.
(D)GPS navigator – system flexibility

Port flexibility
The (D)GPS navigator integrates four configurable NMEA ports. This advanced feature will allow you to e.g. have one port configured with the latest NMEA standard, while another port is capable of running a previous version. In this way you can connect older equipment onboard. It also has one in and two contact outputs and LAN, which facilitates route data transfer and/or interswitching.

Easy installation
The display is very compact and can be mounted virtually anywhere, allowing for a flexible installation approach in confined spaces. The base of the sensor is designed for an easy installation, either on a pole or on an extension mast. The base also includes a slot allowing for easy cable management, significantly reducing installation time.

My memory
Up to 10,000 waypoints can be stored in the internal memory. All waypoints can be named and renamed up to sixteen characters. You can make 100 routes with 512 waypoints per route, which can be entered randomly, and there’s room for 2000 points for the ship's track and up to 1000 for events and marks.

LAN advantage
Via a LAN connection, you can easily connect two displays. The second display is fully operable and auto synchronises with the main display, which is directly connected to (D)GPS sensor, allowing e.g. acknowledging alarm or adjusting waypoints/routes at a secondary location on the ship.

You can also set for a dual installation, having two (D)GPS sensors connected to two different displays to simply switch when necessary, assuring you always on.

What’s standard in the box?
1. Display1
2. (D)GPS sensor
3. Cables
4. Installation parts
5. Data connector
6. Spare parts
7. Manual

Which cables?
- Power cable display: 2 m
- Sensor to display: 10 m (JLR-7500)
- Sensor to display: 15 m (JLR-7800)
- Display to junction box: 5m

1 including bracket
(D)GPS navigator – dimensions and mass

**Dimension drawings - Display**

NWZ-4740 MASS 2.3 kg

Cutout for panel mount: height 166 mm, width 220 mm, depth 180 mm

**Dimension drawings - Sensor JLR-7500**

JLR-4340 MASS 0.7 kg

Mounting screw 1-inch 14UNS-2B

**Dimension drawings - Sensor JLR-7800**

JLR-4341 MASS 1.7 kg

Mounting screw 1-inch 14UNS-2B

**Dimension drawings - Rectifier**

NBG-320 MASS 3.3 kg

Optional
# (D)GPS navigator – specifications

<table>
<thead>
<tr>
<th>Model</th>
<th>JLR-7500</th>
<th>JLR-7800</th>
</tr>
</thead>
<tbody>
<tr>
<td>IMO compliant</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

## General
- **Display**: 5.7-inch, white LED backlight, 320 by 240 pixels
- **Dimmer**: 4 stages (bright, middle, dark, off)
- **Power supply**: 10.8V to 31.2V DC <10 W
- **Serial data in/out**: output: 4 ch (IEC61162-1), input: 1 ch
- **Contact signal in/out**: output: 2 ch, input 1 ch
- **LAN**: built-in 10/100 Mbps
- **Data backup**: display: flash ROM, sensor: SRAM with battery
- **Waypoint**: 10,000 points, event memory 1000 points, WPT name: 16 characters
- **Waypoint input**: LAT/LON, bearing/range, event, TD
- **WPT/route data transfer**: via LAN and RS-232C
- **Track/route**: 2000 points, 100 routes with 512 WPT per route
- **Plot scale**: 0.2, 0.5, 1, 2, 5, 10, 20, 50, 100, 200, 300 NM
- **Plot interval**: 1 up to 60 min (1 sec) or 0.01 to 99.99 NM (0.01 NM)
- **Navigation calculation**: select Great Circle and Rhumb line for each leg (total distance up to 99,999 nm)
- **Screen mode**: LAT/LON, CDI (highway), trackplot, GPS sat. info, enter WPT/route planning, WPT info
- **Alarms**: arrival, anchor, boundary, XTD, no position fix, speed, trip, 1) temperature, 1) depth, HDOP
- **Adjust magnetic variation**: auto or manual
- **Geodetic system**: 46 systems
- **Units**: NM/kn, km/kPh, mi/miPh, m, ft, ft, °C or °F
- **LORAN C/A convert**: convert LAT/LON to TD of LORAN C/A

## GPS spec
- **Receiver/sensor type**: multichannel (12 ch), SBAS (1 ch), DGPS integrated
- **Frequency**: 1575.42 MHz ±1 MHz (C/A code)
- **Satellite tracking**: up to 12 satellites
- **SBAS**: WAAS, MSAS, EGNOS
- **Accuracy**: 13 m (HDOP <4 SA off), 7 m (SBAS) 2dRMS
- **Power supply**: 10.8V to 31.2V AC, <1.5 W

## NMEA
- **Version**: 1.5, 2.1, 2.3
- **Bit rate**: 4800, 9600, 19200, 38400
- **Output**: GGA, RMC, GLL, VTG, GSA, GSV, DMT, GBS, GRS, GST, ZDA, GNS, ALR, APB, BOD, BWC, BWR, RMB, XTE, ZTG, AAM, RTE, WPL, ACK, 2) MSS, 3) [VDR, VHvH, HTHS, BTHS, BDT, DPT, MTW, CUR, VBW]
- **Input**: HDT, THS, BDT, DPT, MTW, CUR, VBV, VHvH, ACK, WPL, RTE ALR
- **Interval**: 1, 2, 3, 4, 5, 6, 7, 8, 9 sec and off

## Environment
- **Operating temperature**: sensor –25° to +55°C, display –15° to +55°C
- **Storage temperature**: sensor –40° to +70°C, display –25° to +70°C
- **Operating humidity**: 0% to 93% non-condensing
- **Water resistance**: sensor IEC60945 (ed.4), USCG CFR-46, display IP44

## Optional items
- **Rectifier**: NBG-320
- **Printer (table mount)**: DPU-414
- **Connection box**: CQD-10
- **Data switching unit**: NCZ-777
- **Junction box**: NQE-7700A
- **Extension cable (15 m)**: CFQ-9000

---

*Specifications may be subject to change without notice.*

---

**All specifications are subject to change without notification.**

**For further information, contact:**

---

© 2009 JRC

---

**ISO9001, ISO14001 Certified**

---

Printed in Japan