JLR-7600/7900
(D)GPS navigator

RMS

– the JLR-7600/7900 delivers high accuracy performance while keeping operation easy

4.5-inch high brightness display
Dual color LED backlight
Proven sensors for high accuracy positioning
Built in SBAS and RAIM function
3 in/outputs (NMEA0183)

Features

Features

The JLR-7600/7900 (D)GPS navigator will locate your position fast and with high accuracy, keeping the unit compact and easy to install.

Dual LED backlight

The unit incorporates many displays modes readily available on a highly visible 4.5-inch LCD display. Besides the display being fully dimmable and having backlit keys, it features dual LED backlight (white and orange), making it easy to operate in various light settings on the bridge.

Route planning

The new (D)GPS allows you to set the distance calculation method directly from the menu. It is possible to set either Rhumb lines (RL) for short legs or Great Circle (GC) for the long distance legs. Depending on your route, simply make your selection to reach your destination effortlessly.

Memory

Up to 1,000 waypoints can be stored in the internal memory. All waypoints can be named and renamed up to eight characters. You can make 20 routes with 50 waypoints per route, which can be entered randomly, and there's room for 2,000 points for ships' track and up to 1,000 for events and marks.

No flush mount kit

With JRC's new design approach, a flush mount kit is not required and screws are nicely concealed behind the front cover.

The display is very compact and can be mounted virtually anywhere, allowing for flexible installation approach.

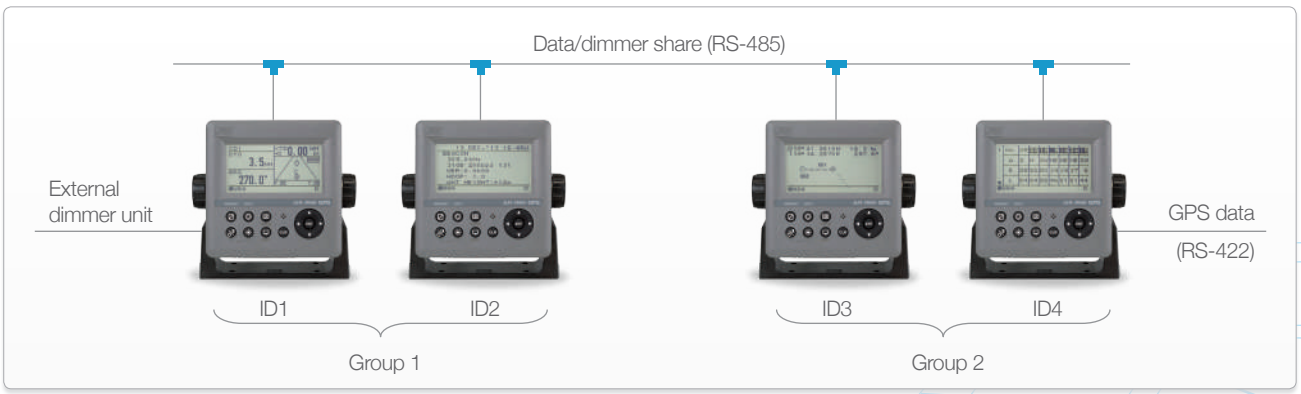
Operation

Uniform operation

In keeping with the company's philosophy of an easy to use Man Machine Interface, the new generation displays have allowed JRC's engineers to develop an exciting new software approach for uniform operation.

Flexible data and dimmer share

The display of the JLR-7600/7900 can be purchased separately as Multi Info Display (MID). It allows full NMEA0183 data share for up to 10 displays and can be flexibly installed. The same applies for dimmer share. By changing the intensity on one of the units, it automatically shares the new settings to the other displays. Sample:



In this sample, the display with ID4 receives data (RS-422) from sensor or optional junction box and outputs vessel position data (RS-485) to all connected display. Dimmer share has been separated in two groups, whereas group 1 can be operated by external dimmer and group 2 is linked pressing the button on the display.

Flexibility

Interfacing

Interfacing is made easy and cost-effective. The display is equipped with three serial ports, each able to send or receive data. Simply connect the GPS or DGPS sensor to the display and a cost-effective MED approved solution is born. In case extensive interfacing required, an optional junction box to enable external dimming, buzzer, connect a printer and naturally connect to radar, ECDIS, doppler current meter but also to JRC's Remote Maintenance System.

Satellite integrity check

Our proven sensors include 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.

Proven sensors

The sensors used are also used with the JLR-7500/7800 series which have been well proven in the market. The base of the sensor is designed for easy installation, either on a pole or on a extension mast. The base also include a slot allowing for easy cable management, significantly reducing installation time.

JLR-4340 (GPS)

JLR-4341 (DGPS)

In the box

- GPS or DGPS sensor
- Display, Bracket
- Data/Power cable (2m)
- Installation materials
- Spare parts
- Manual

Options

• Power supply (AC in, DC out)	NBG-320
• Power supply (AC/DC in, DC out)	NBD-577C
• T-shape connector (for RS-485)	5JCDX071
• Junction box (extend in/out)	CQD-10
• Printer (paper)	NKG-94 (7ZPJD0384)
• Junction box (extend sensor)	NQE-7700A
• Pole mount kit for NQE-7700A	MPBP30608
• Output buffer (12 outputs)	NQA-4251A
• GPS changeover switch	NCZ-777

Cables options

• Data/Power cable (10/20m)	CFQ-5766D/F (with 1A fuse in holder/data/power/contact)
• Data cable (3m)	CFQ-5769 (data/dimmer share)
• Antenna cable (15m)	CFQ-9000 (antenna extension cable)

Weight and dimensions

Display unit

NWZ-4610 Weight 600 g (+ bracket 130g)

Cutout dimensions

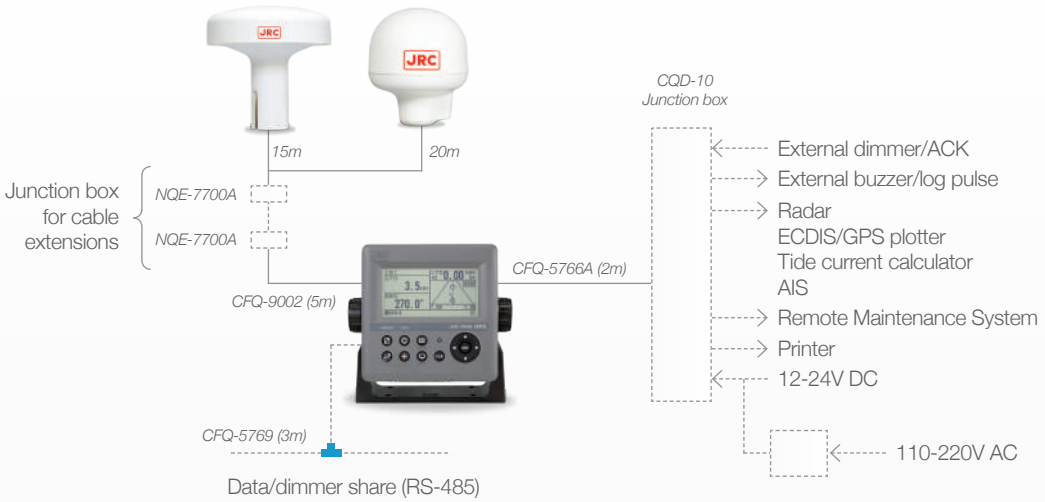
GPS sensor

JLR-4340 Weight 700 g

DGPS sensor

JLR-4341 Weight 1,7 kg

System diagram



Specifications

	JLR-7600 GPS	JLR-7900 DGPS
MED approved	✓	✓
Scanners	4.5-inch monochrome (128 by 64dots)	
Backlight	White and orange LED selectable	
Dimmer levels	Bright, medium, dark, off	
Memory	1,000 waypoints (including MOB/event), 2,000 track points, 20 routes	
Route plan	50 waypoints per route	
Geodetic datum	Selection among 47 geodetic datum	
Magnetic variation	Automatic or manual selection	
Navigation calculation	Great circle or rhumb line selectable	
Alarm	Arrival, anchor, XTD, no position fix, speed, trip, HDOP, DGPS	
Plot function scale	0.125, 0.25, 0.5, 1, 2, 5, 10, 20, 50, 100 NM Interval 1 sec - 60 min (1 sec) or distance 1 - 99.99 NM (0.01 NM) selectable	
Interfacing	Data/power 12-24V DC, serial 3 in/output (RS-422), contract 1 in/output Data 1: serial 1 in/output (RS-485) for data/dimmer sharing Sensor/data 2: serial 1 in/output (sensor) or daisy chain	
Selectable units	Distance/speed: NM/kn, km/km/h, mi/mi/h Height: m/ft/fm	
Language	English, Japanese	
Power supply	10.8-31.2V DC (optional power supply 100-240V AC), less than 4W	
Sensor type	Multichannel (12ch), SBAS (1ch)	Multichannel (12ch), SBAS (1ch), DGPS
Frequency	1575.42 MHz ± 1 MHz (C/A code)	
SBAS	WAAS, MSAS, EGNOS	
Accuracy	13m (HDOP 4 SA off), 7m (SBAS) 2dRMS	13m (HDOP 4 SA off), 7m (SBAS), 5m (beacon) 2dRMS
Power supply	10.8-31.2V DC, less than 1.5W	10.8-31.2V DC, less than 2.5W
NMEA version	1.5, 2.1, 2.3, 4.0	
Bit rate	4800, 9600, 19200, 38400 bps	
Output sentence	GGA, RMC, GLL, VTG, GSA, GSV, DTM, GBS, GRS, GST, ZDA, GNS, MSS*1, ALR, BOD, RMB, ACK	
Output interval	1, 2, 3, 4, 5, 6, 7, 8, 9 sec, off	
Ambient conditions	Operation temperature: -25 to 55°C (sensor), -15 to 55°C (display) Storage temperature: -40 to 70°C (sensor), -25 to 70°C (display) Relative humidity: 0% to 93% non-condensing Vibration/EMC: IEC60945 ed.4 compliant Waterproof/dustproof: IP56 (sensor), IP55 (display)	

*1 Only available on the JLR-7900

JRC offices around the world

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