

GNSS Compass

JLR-41



- High-accuracy positioning and heading data
- Support multi-GNSS sensor
- Spoofing / jamming detection function available¹
- Supports rolling, pitching, rate of turn and heaving measurements
- IMO type-approved Transmitting Heading Device (THD) and Satellite Positioning System (GPS)
- Excellent visibility and operability with 6.5-inch high-brightness color touch panel LCD



Sensor
JLR-4101



Display Unit
NWZ-1680



Category

All vessel types



Deepsea



Workboats



Fishing



Yaching

¹A separate license is required to enable the spoofing/jamming detection function.



Japan Radio Co., Ltd.

Features |

The GNSS Compass JLR-41 is a heading sensor that uses GNSS (Global Navigation Satellite System) to determine the ship's heading. The Sensor is more accurate and smaller than our previous JLR-21 sensor.

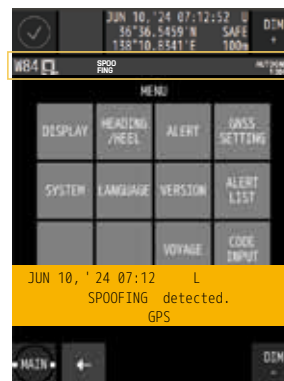
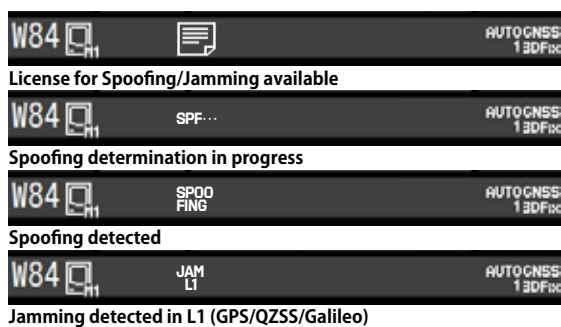


- High-accuracy and stability
- Spoofing/jamming detection function
- High-reliability by the multi-GNSS receivers (GPS/Galileo/GLONASS/BeiDou/SBAS/QZSS)
- High-visibility 6.5-inch large color LCD
- Enhanced attitude measurement functions (rolling, pitching, heaving)
- Provided with many graphic display modes
- Short static period (standard 2 minutes or less)
- Improve operability by touch panel and abundant menus
- Easy-to-understand descriptive display

Spoofing/Jamming Detection Function |

The new GNSS Compass JLR-41 has a spoofing/jamming detection function feature. When spoofing/jamming is detected, it notifies the user with a pop-up, icon, and buzzer. This can contribute to safe and secure navigation.

Spoofing/Jamming Detection Example of Icon Display



Status Area

Displays the status of the equipment or system with the icon.

Notification by Popup

¹A separate license is required to enable the spoofing/jamming detection function.

Multi-GNSS Sensor |

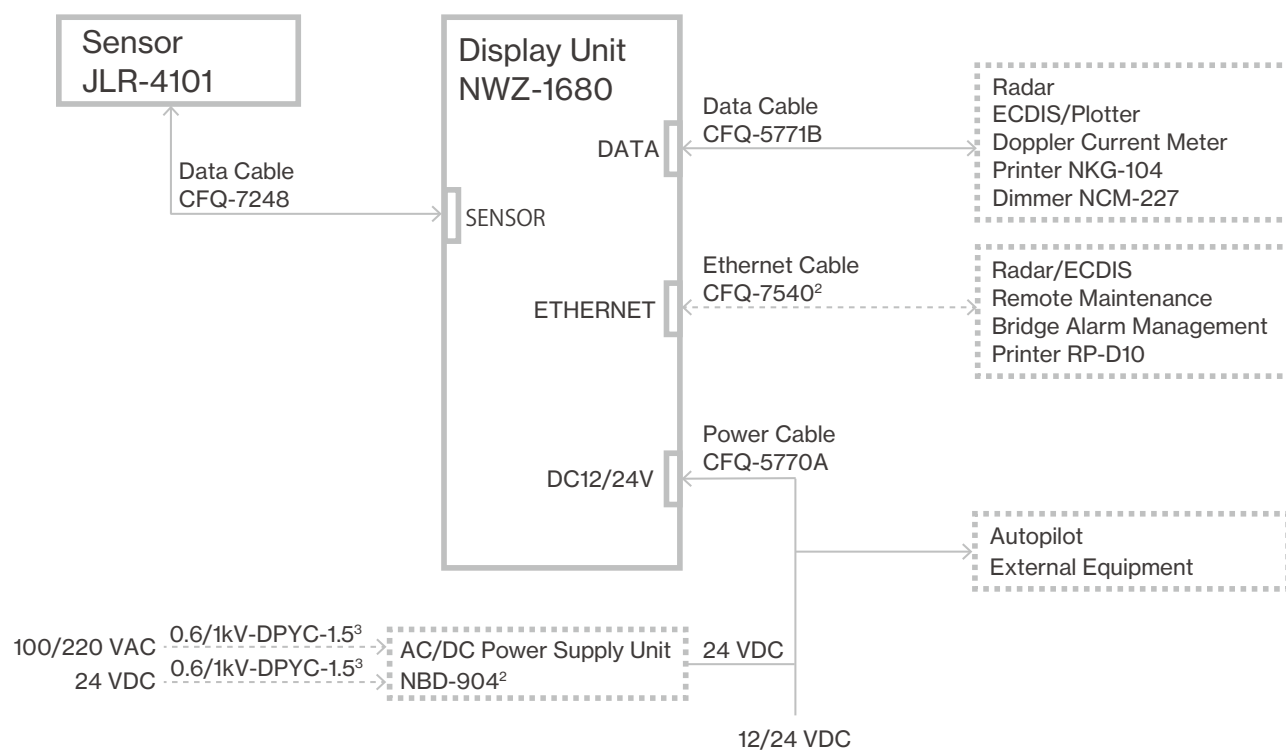
The newly designed multi-GNSS sensor can simultaneously receive GPS, Galileo, GLONASS, BeiDou, and QZSS data, enabling highly accurate positioning without the use of beacons or SBAS, thereby enhancing orientation performance.



6.5-inch Large Color LCD |

The new GNSS Compass JLR-41 combined with our trusted 6.5-inch color touch panel display will providing you with the comfort of an intuitive operational approach.

System Diagram



²Option

³Shipyard Arrangements

Tec Specs

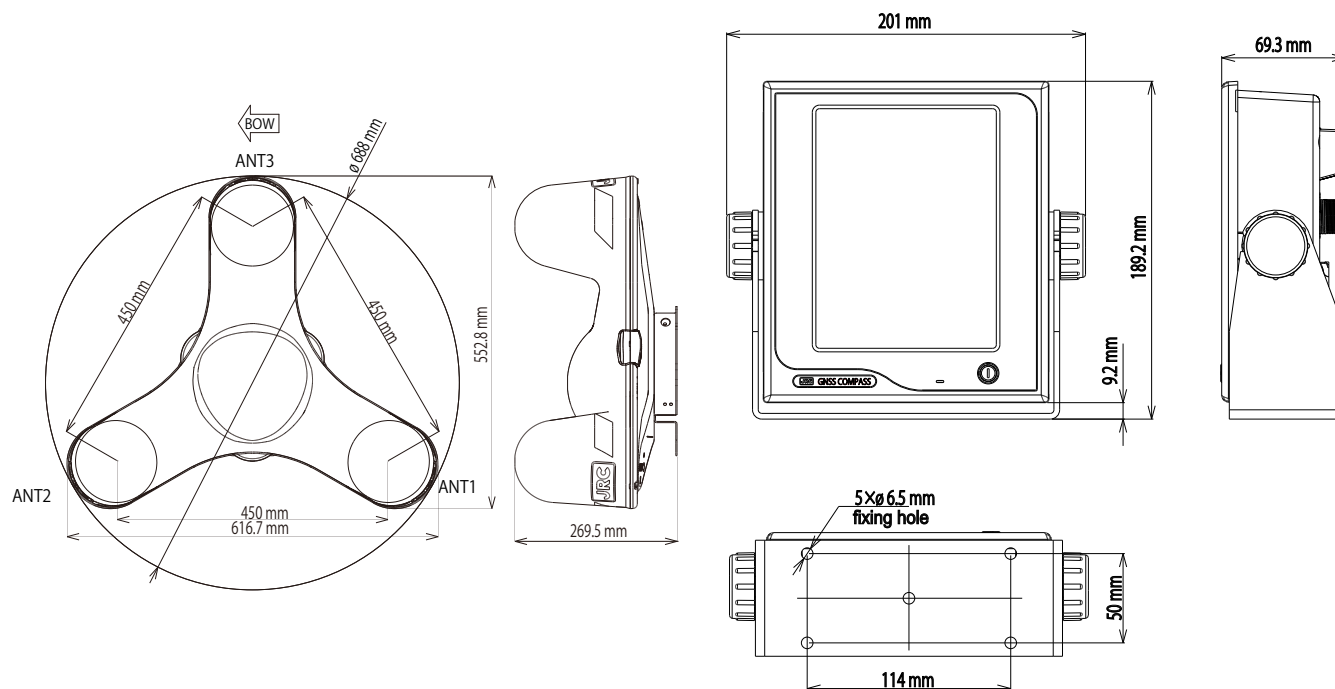
Sensor RoHS

JLR-4101 Mass: Approx. 5.3 kg (11.67 lbs)

Display Unit RoHS

NWZ-1680 Mass: Approx. 1.8 kg (3.97 lbs)

*including Base Kits



Specifications

Sensor	JLR-4101
Receiver System	GPS/Galileo/GLONASS/BeiDou/SBAS/QZSS
Receiver Type	GPS+QZSS: 15 ch, SBAS: 1 ch, Galileo+GLONASS or Galileo+BeiDou: 10 ch
Receiving Frequency	1575.42 MHz (GPS/Galileo/SBAS/QZSS), 1598.063-1605.375 MHz (GLONASS), 1561.098 MHz (BeiDou)
Course Accuracy	0.25° RMS
Attitude Accuracy (Roll)	0.4° RMS
Attitude Accuracy (Pitch)	0.4° RMS
Attitude Accuracy (Heaving)	5 cm RMS
Course Resolution	0.1°/0.01°
Speed Resolution	0.1 kn/0.01 kn
Attitude Resolution	0.1°
Tracking Rate of Turn	45°/sec
Start-up Time	Less than 2 minutes (warm start fix, typically 30 seconds)
SBAS Receiver	WAAS, MSAS, EGNOS
Positional Accuracy	Multi-GNSS (PPP positioning): 1.8 m (2DRMS) (HDOP ≤ 4 SA OFF), multi-GNSS (non-PPP positioning): 4 m (2DRMS), DGPS: 4 m (2DRMS), SBAS: 4 m (2DRMS), GPS or GPS+QZSS: 5 m (2DRMS), GLONASS: 10 m (2DRMS), Galileo: 6 m (2DRMS), BeiDou: 10 m (2DRMS)
Spoofing/Jamming	Can be detected (license require)
Display	NWZ-1680
Display Unit	6.5-inch TFT color touch panel LCD, 640x480 dots (VGA)/Brightness: 800 cd/m ²
Display Modes	Heading, navigation information, plot, analog, highway, satellite information, waypoint information, beacon text, navigation aid
Power	12/24 VDC (+30 %, -10 %)
Power Consumption	Less than 14 W (including sensor)
Interface	
Port	IEC 61162-1: (input) 1 port, (output) 2 ports IEC 61162-2: (output) 1 port LAN (IEC 61162-450): 1 port Sensor through (IEC 61162-1): (output) 2 ports Dry contact: (input) 1 port, (output) 3 ports
NMEA 0183 Version	Ver1.5/2.1/2.3/4.0
NMEA 0183 Input Sentence	ACK, ACN, DDC, HBT, POS
NMEA 0183 Output Sentence	AGL, ALC, ALF, ALR, ARC, DDC, DTM, GBS, GGA, GLL, GNS, GRS, GSA, GST, GSV, HBT, HDT, HRM, MSS, RMC, POS, ROT, THS, VTG, ZDA
Environmental Conditions	
Operating Temperature	Sensor: -25 to +55 °C , Display Unit: -15 to +55 °C
Storage Temperature	Sensor: -25 to +70 °C , Display Unit: -25 to +70 °C
Degree of Protection	Sensor: IP56, Display Unit: IP56

In the Box		Option			
Sensor	JLR-4101	Data Cable (30 m)	CFQ7248-30	Base Kits	MPBX50347
Display Unit	NWZ-1680	Extension Cable (10 m)	CFQ7249-10	Select Switch	NCZ-777
Power Cable	CFQ-5770A	Extension Cable (20 m)	CFQ-7249	Select Switch	NCZ-1537B
Data Cable	CFQ-7248	Junction Box	NQE-7720	Junction Box	CQD-10
Data Cable	CFQ-5771B	Beacon Connecting Cable	CFQ-7250	Output Buffer	NQA-4351
Instruction Manual	English: P00011567	Installation Trestle	P00004089	Printer	NKG-104
Bridge Card	English: P00022759	Bird Repellent Rod	P00015258	Printer	RP-D10
		Power Cable	CFQ-5770D	External Dimmer Unit	NCM-227
		Data Cable (10 m)	CFQ-5771D	AC/DC Power Supply Unit	NBD-904
		Ethernet Cable (15 m)	CFQ-7540	Conversion Cable	P00014414

• Specifications may be subject to change without notice.

For further information, contact:



Japan Radio Co., Ltd.

URL <https://www.jrc.co.jp/eng/>

Tatsumi Office: 7-32, Tatsumi 1-chome, Koto-ku, Tokyo
135-0053, Japan
Telephone: +81-3-5534-1205
Facsimile : +81-3-5534-1199

**Rotterdam, Singapore, Houston, Shanghai, Busan
Egersund, Rio de Janeiro**