JRC

GPS COMPASS
JLR-10

The new technology JLR-10 is a type of compass which uses GPS signals to produce the ship's heading information.
The compass consists of an antenna unit, processing unit and display unit.
Connection to JRC Radar models JMA-3800 and JMA-3900 series can be fully operable in both the North Up and MARPA or ATA function.

■ JRC original 2 antenna type
The JLR-10 adopts 2 antenna type which is superior in the direction accuracy, availability and easy installation.

■ No Maintenance and No Calibration
The JLR-10 needs no maintenance, compared to a standard gyrocompass which needs both regular maintenance and calibration.

In addition the JLR-10 has the following features.

■ Short Setting Time
The JLR-10 outputs direction information typically 3 minutes after power on.

■ Including GPS Receiver Functions
The JLR-10 outputs position and ground speed data as well as ship's heading.

■ Synchro Signal output (Optional)
The JLR-10 connects with Synchro-type of repeater compass, radar, auto-pilot, soner and tide meter thorough the optional interface.

■ Direct connection to JRC JMA-3800 and JMA-3900 series Radars
The JLR-10 outputs high speed JRC NSK Format to directly connect to the JRC Radar JMA-3800 and the JMA-3900.

JRC Japan Radio Co., Ltd.

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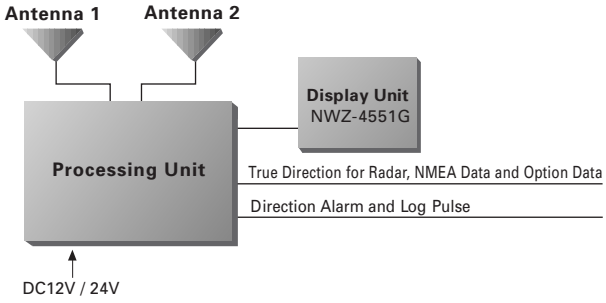
Specifications

Receiver type	Multichannel (12-CH) all-in-view
Frequency	1575.42MHz±1MHz (C/A code)
Sensitivity	-130dBm for acquisition, -133dBm for tracking
Direction accuracy	1 Degree 1RMS (C/A code, HDOP<4)
Resolution	0.1 Degree
Setting time	Typical 3 minutes (warm start fix)
Tracking rate of turn	25 Degrees / sec
Tracking acceleration	1G
Maximum roll and pitch angle	30 Degrees
Position accuracy	15mRMS (C/A code, HDOP<4)
Time to first fix	Typical 30 seconds (warm start fix)
DGPS input	RTCM SC-104 ver 2.0 type 1,2,7,9 available
Geodetic datum	46 (WGS-84, WGS-72, Japan, America, Canada/ Alaska, Europe, Australia, England, NAD-83, other 37 selectable)
Data output 5 channels	**(1) NMEA 0183 for Display: Ship's Heading Direction, Position, and Ground Speed** (HDT, GGA, GLL, RMC, GLL, VTG, GSA, GSV, DTM) 4800bps, 1 second Output **(2) NSK or NMEA 0183 Format for Radar: Ship's Heading Direction** (HDT) NSK=9600bps, 20ms for JMA-3800/3900 NMEA=4800bps, 50ms for other Radars **(3) NMEA 0183 Format for Option: Ship's Heading Direction** 4800bps, 100ms Output **(4) NMEA 0183 Format for Navaid: Ship's Heading Direction, Position, and Ground Speed** (HDT, ROT, GNS, RMC, VTG, DTM, ZDA) 4800bps, 1 second Output
Pulse Signals	Direction Alarm and Log Pulse
Input voltage	10.8~31.2VDC
Operating temperature	-25**°C** to 55**°C** (Antenna unit only) -15**°C** to 55**°C** (Processing unit and Display unit)
Water proof	USCG CFR-46/ IEC60945 (Antenna unit only)

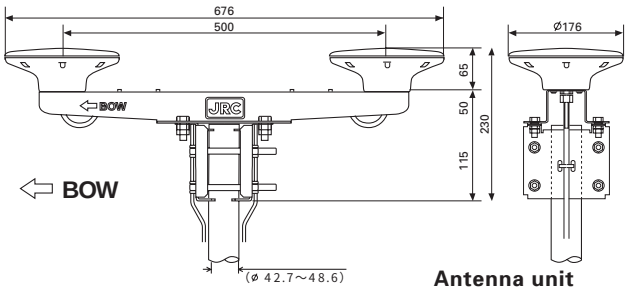
Components

No.	Name	Q'ty	Remarks
1	Antenna unit	1	Include pre-amplifiere,angles, 0.15m(2.5D-2V)cables
2	Processing unit	1	
3	Cables		
	3-1 Antenna cable	2	15m (5D-SFAE)
	3-2 Display unit cable	1	5m
	3-3 Radar cable	1	15m
	3-4 Power cable	1	2m
4	Display uinit	1	NWZ-4551G
5	Instruction manual	1	
6	Installation parts		
	6-1 Pole mounting Kit	1set	For antenna unit
	6-2 Screws	1set	For processing unit
7	Spare parts	1	Fuse

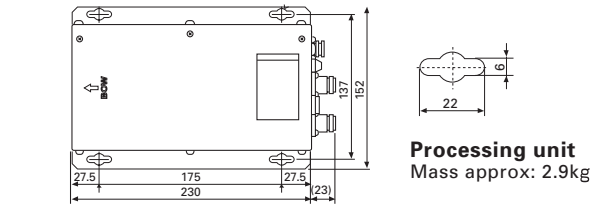
System Configuration



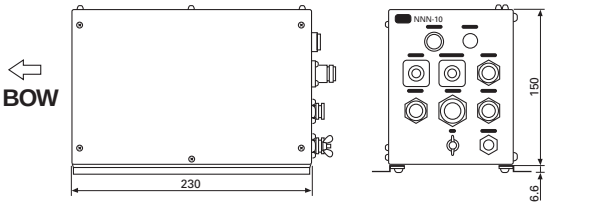
Outline Drawing

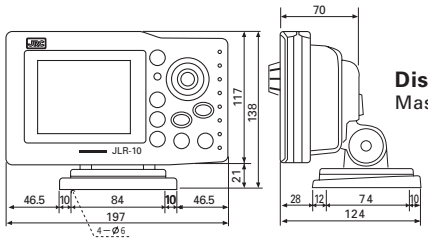


Antenna unit
Mass approx: 3.2kg



Processing unit
Mass approx: 2.9kg





Display unit
Mass approx: 0.9kg

● Specifications subject to change without notice. For further information, contact;

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