

JRC DOPPLER SONAR JLN-520



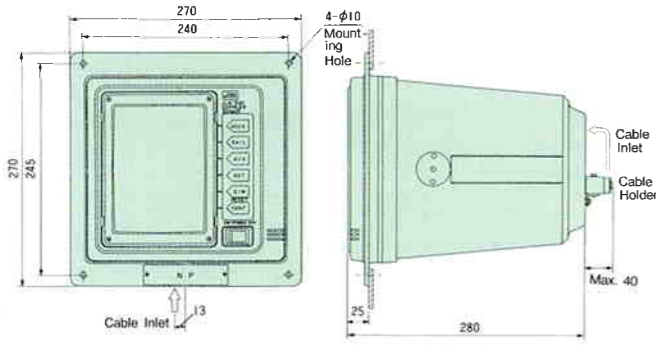
Two-axis
Four-beam



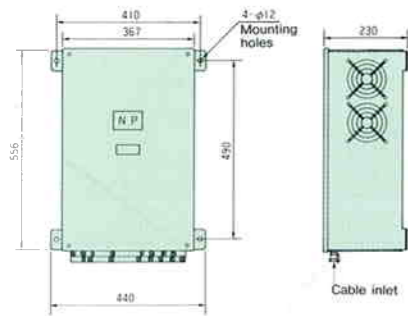
JLN-520

DIMENSIONS & WEIGHT

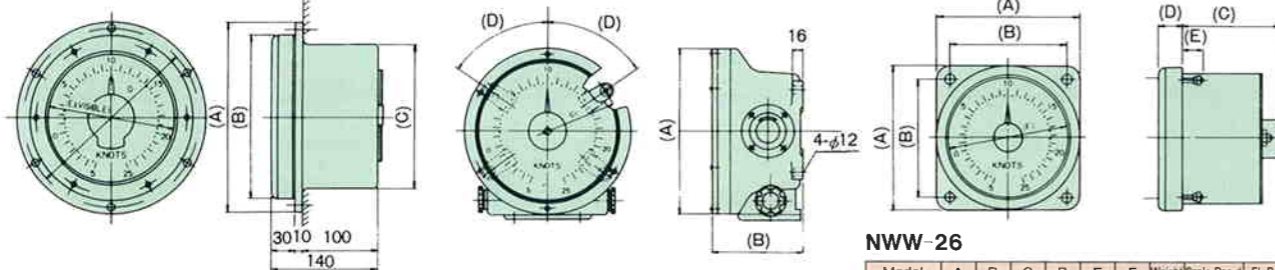
Control Display NWZ-71B Weight : Approx. 7.9kg



Signal Processor NJC-17 Weight : Approx. 37kg



Analog Display Unit



NWW-24

Model	A	B	C	D	E	Weight	Scale Board	EL Board
NWW-24L	φ250	φ216	φ190	φ230	φ170	6.5kg	4-20	Green
							5-25	
NWW-24S	φ200	φ173	φ150	φ186	φ125	3kg	6-30	Orange

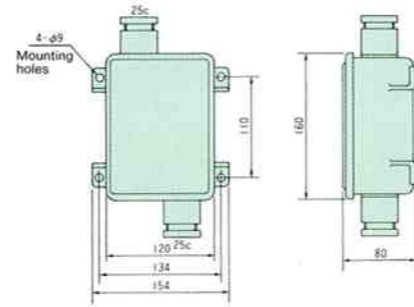
NWW-25

Model	A	B	C	D	Weight	Scale Board	EL Board
NWW-25L	φ250	136	φ220	55	7kg	4-20	Green
							5-25
NWW-25S	φ200	140	φ180	60	5kg	6-30	Orange

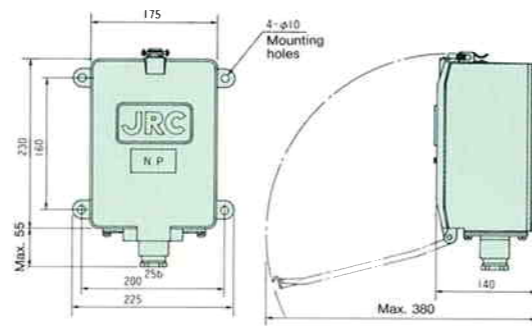
NWW-26

Model	A	B	C	D	E	F	Weight	Scale Board	EL Board
NWW-26L	150	124	110	26	20	φ126	2.5kg	4-20	Green
NWW-26M	120	100	90	23	15	φ100	1.5kg	5-25	Orange
NWW-26S	110	90	75	11	15	φ100	1kg	6-30	Orange

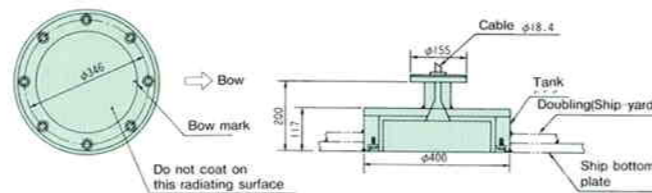
Junction Box NQD-3247 Weight : Approx. 1kg



Wing Display NWW-42 Weight : Approx. 5.6kg



Transducer NKF-747 Weight : Approx. 94kg



Ship Speed Information on 8-inch
Color Graphic Display.



For further information, contact:

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ISO 9001



Certificate No. JQA-0591

Certificate No. FM 30249

17EM



Japan Radio Co., Ltd.

The World's First Display of Acceleration Marks.

The JLN-520 Doppler Sonar is a new type of ship speed and distance measuring equipment using the pulsed Doppler technique. The JLN-520 functions not only as a ground speed sensor to measure the ship's speed relative to the sea bottom in maneuvering the ship in a harbor or a narrow channel, but it can also be used as a through-the-water speed sensor in deep-sea navigation. The JLN-520 is a powerful sensor for various types of navigational equipment.



JLN-520



FEATURES

- Measurement of ground speeds in a depth range of approx. 1 meter to approx. 700 meters.
- The world's first display of acceleration/deceleration marks on graphic display.
- Simultaneous measurement of ground and through-the-water speeds.
- Small-sized transducer.
- Self-diagnostic facility.
- Under application for type approvals.

SPECIFICATIONS

- Operation system : Two-axis four-beam pulsed Doppler system
- Operating frequency : 70 kHz
- Measuring ranges
Speed range : Ahead/astern -10 to +30 knots
Port/starboard -10 to +10 knots
- Distance run range : 0 to 99999.99 nautical miles
- Depth range
Ground speed : Approx. 1 m to approx. 700 m (though this range depends upon underwater and sea-bottom conditions.)
Through-the-water speed : Over approx. 20 m below hull bottom
Automatically switched over to through-the-water speed measurement at the depth range of over 700 m
- Measuring accuracy : ±0.2% rms or ±0.01 knot, whichever is greater. (electrical accuracy)
- Resolution : 0.01 knot
- Display speed unit : Knot or m/s
- External outputs
Ship speed : Four digital outputs (for remote display)
Analog outputs : Ahead/astern (-10 to +10 V)
Port/starboard (-10 to +10 V)
Two NMEA outputs
Distance run : Two-axis with sign (200 to 4000 p/nm)
Four group A resultant outputs (200 to 4000 p/nm)
Four group B resultant outputs (200 to 4000 p/nm)
(The distance run outputs can be programmed independently for pulse rate, bottom track or water track)
- Power supply : 100/110/115/220 VAC ±10%, 50/60 Hz, approx. 300 VA
- Ambient temperature : -15 to +55°C

※In case ship draws light or ocean is bad condition, it sometimes is incapable of exact measurement by bubbles against transducer.

OPERATING MODES AND DISPLAY ITEMS

Operating Mode		Display Items
Docking Mode	DOCK 1	Ahead/astern speed Port/starboard speed Water depth
	DOCK 2	Graphic display of DOCK 1 items and acceleration/deceleration mark
Sailing Mode	SAIL 1	Ahead/astern speed Port/starboard speed Distance run (Total and waypoint to waypoint)
	SAIL 2	Graphic display of SAIL 1 items
	SAIL 3	Resultant speed Drift angle Distance run (Total and waypoint to waypoint)
	SAIL 4	Graphic display of SAIL 3 items
Auxiliary Mode	AUX 1	Tidal currents Resultant speed Distance run Water depth
	AUX 2	Graphic display of AUX 1 items
	AUX 3	Year/Month/Day Own ship's position Resultant speed/course (in the case of connection with GPS)
	AUX 4	Graphic display of AUX 3 items

DISPLAY EXAMPLES

<DOCK 1> Docking Mode

Port/starboard direction
Port/starboard speed
Ahead/astern speed
Water depth

<DOCK 2> Graphic Display of DOCK 1

Vessel speed vector
Acceleration mark
Port/starboard speed
Speed reduction mark
Ahead/astern speed

<SAIL 1> Sailing Mode (Element)

Ahead/astern speed
Port/starboard speed
Trip run distance
Total run distance

<SAIL 2> Graphic Display of SAIL 1

Vessel speed vector
Ahead/astern speed
Port/starboard speed
Trip run distance
Total run distance

<SAIL 3> Sailing Mode (Vector)

True vessel speed
Drift angle
Trip run distance
Total run distance

<SAIL 4> Graphic Display of SAIL 3

True vessel speed
Drift angle
Trip run distance
Total run distance

<AUX 1> Auxiliary Mode (CURRENT)

Current speed, direction
True vessel speed, drift angle
Trip run distance
Water depth

<AUX 2> Graphic Display of AUX 1

Current speed
Current direction

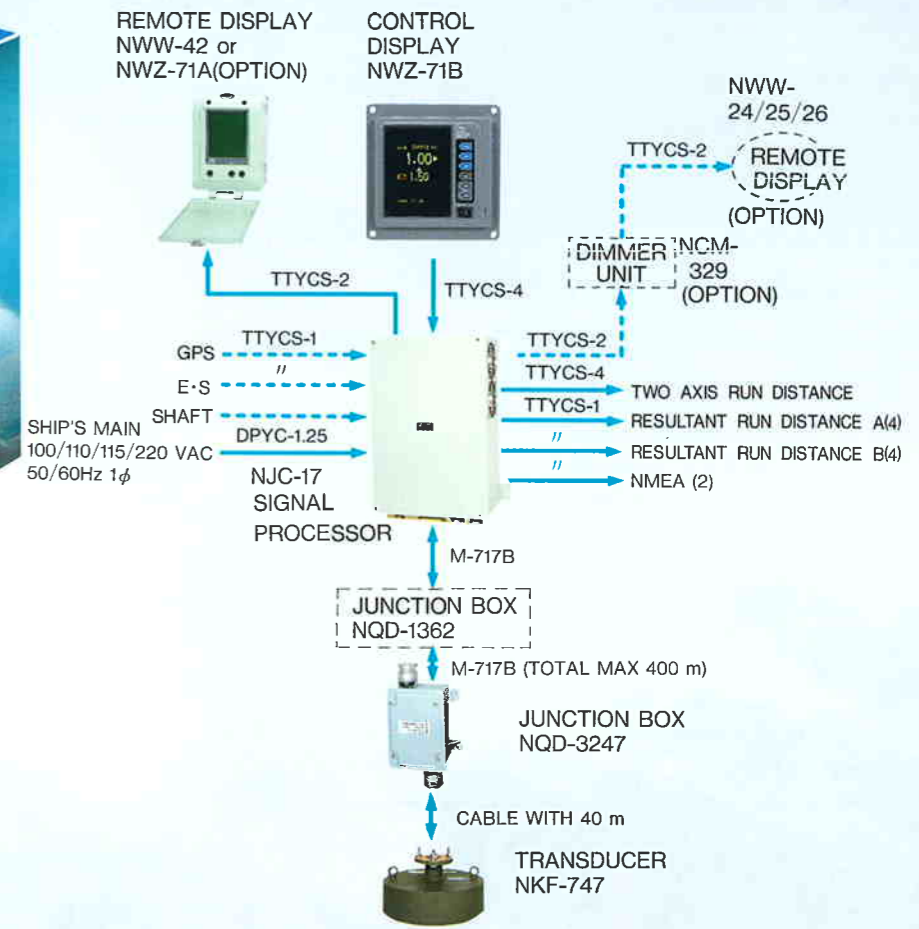
<AUX 3> Auxiliary Mode (GPS)

Date
Time
Latitude
Longitude
Vessel speed, bearing

<AUX 4> Graphic Display of AUX 3

Vessel speed
Bearing

SCHEMATIC DIAGRAM



STANDARD COMPONENTS

Item	Model	Q'ty	Remarks
Control/Display Unit	NWZ-71B	1	Flush-mount
Signal Processor Unit	NJC-17	1	
Junction Box	NQD-3247	1	
Transducer Unit	NKF-747	1	
Spare Parts	6ZXB500163	1 set	
Instruction Manual	JLN-520	1	

OPTIONS

Item	Model	Remarks
Remote Display Unit	NWW-24XXX	Analog flush-mount
Remote Display Unit	NWW-25XXX	Analog wall-mount
Remote Display Unit	NWW-26XXX	Analog small flush-mount
Dimmer Unit	NCM-329	For analog display units
Extension Cable	M-717B	
Junction Box	NQD-1362	With M-717B cable
Control/Display Unit	NWZ-71A	Desk-top type
Wing Display Unit	NWW-42	