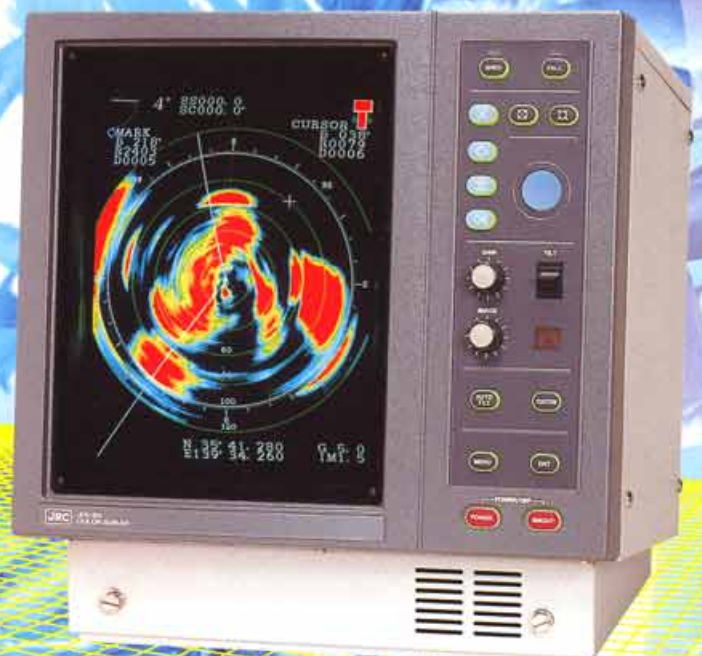


JRC OMNIDIRECTIONAL COLOR SCANNING SONAR

JFS-80

**JRC's New Low-Cost, Compact Design,
Practical Omnidirectional Scanning Sonar**





The JFS-80 Color Scanning Sonar is a remarkably compact sonar with Omnidirectional scanning, a unique model for its class, offering a detection range as broad as large sonars.

It is also equipped with a fish-school tracking function, previously available only on large sonars, which enables the ship to pursue the fish-school while it's running.

By entering a "fish mark" on a targeted echo, its fish-school volume can be indicated numerically, making it easy to determine the fish-school volume and density. It is also possible to multiple echoes for more efficient fishing.

Omnidirectional scanning and fish-school track functions rivaling those of large sonars for easy detection of fish-schools.

Features

Compact, Omnidirectional Scanning Sonar :

The JFS-80 is a compact sonar offering omnidirectional scanning, unique for this class. Its detection range so broad as that of large sonars.

Fish-school track function sonars :

For easy pursuit of fish-schools, the JFS-80 supports the fish-school track function that has been provided only by large sonars. To monitor fish-school tracks continuously, the tilt angle of the pulse beam automatically changes with the movement of the ship.

Numerical display of fish-school volumes :

By entering a "fish mark" on the echo of a targeted fish-school, the volume of the fish-school can be calculated and indicated numerically. This function makes it easy to determine the fish-school volume and density, and also enables comparison of multiple echoes.

Compact, Two-Unit Design :

Considering of a Display unit and a Transducer unit, the JFS-80 is compact enough to fit neatly in a small boat.

Easy operation :

Pressing the "CUSTOM" key returns you to your normal customized display. There's also the convenient "IMAGE MODE" switch which lets you select optimum setting without the need for troublesome sensitivity and interference rejection adjustments.

Specifications

Display unit

- | | |
|--------------------------|---|
| 1) Display type | 14-inch high resolution color CRT |
| 2) Resolution | 640 x 480 pixels |
| 3) Display colors | 16 colors x 8 gradations |
| 4) Background colors | Selectable from 5 colors |
| 5) Display mode | PPI display |
| 6) Display marks | Own ship, SHM(Ship's Heading Marker), Cursor, Audible sound azimuth, Alarm area, Fish-school volume, Track, Event mark, Fish mark, North mark, Tidal current |
| 7) Numerical Indications | Scan data (range, sensitivity, tilt angle, IMAGE MODE switch)
Cursor position (horizontal range, vertical range, angle)
Fish mark (bearing, range, depth)
Fish-school volume
Setting value
Own ship's position
Ship's speed/bearing
Depth/Temperature
Tidal current |
| 8) Other functions | Mark/data display ON/OFF, IMAGE MODE switch, Automatic tilt angle control, AGC, TVG, Clutter
Fish-school alarm
Hoist alarm
Target echo |

Ranges

- | | |
|-----------------|--|
| 1) Sonar ranges | 50, 100, 150, 200, 250, 300, 350, 400, 450, 500, 600, 800, 1000, 1600m
Feet (150..... 6000)
Fathoms (25..... 1000)
Passi/Braza (30..... 1000)
* Detection may be not available depending the target or sea conditions. |
|-----------------|--|

Audible sound

- | | |
|---------------------|--|
| 1) Composition | Built-in speaker, 1000Hz:2W |
| 2) Tilt scan angles | 20°, 40°, 80°, 120°, possible to oscillate |

Transceiver unit

- | | |
|-----------------------|---|
| 1) Transmit frequency | 55kHz Band |
| 2) Power reduction | Continuously variable |
| 3) Pulse width | Automatically adjusted to the selected range |
| 4) Reception system | Low noise superheterodyne
Continuous scan beam, AGC, TVG |
| 5) Tilt angle range | -5° to 60° |

Transducer unit

- | | |
|-------------------------|--|
| 1) Hoist stroke | 600mm |
| 2) Hoist time | 15 sec. |
| 3) Allowable ship speed | Max. 18 knots
16 knots during hoist operation |

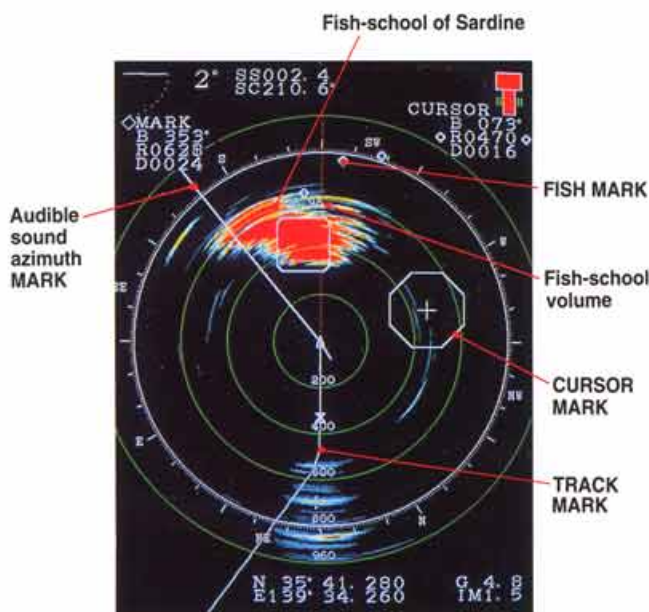
Power Consumption

24V DC, (20 - 32V DC)
Average 0.4kW
Max. 63A at the start of hoist operation
*(100/110/200/220/240V AC) with rectify option

Ambient conditions

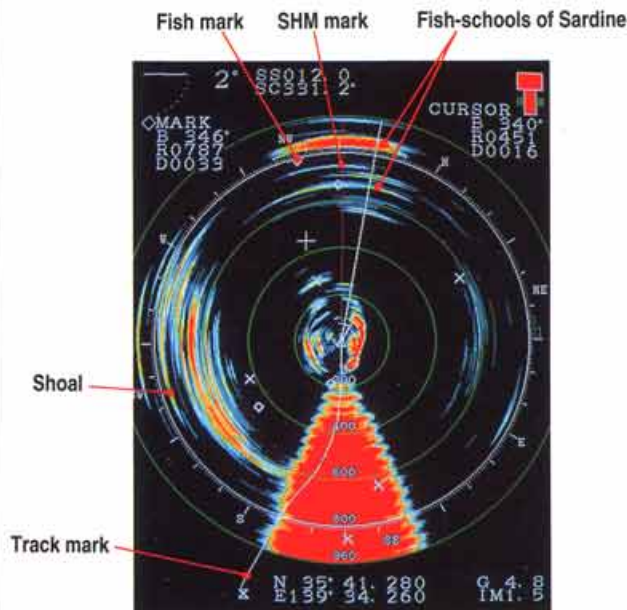
Temperature 0° to 50°C /
Humidity 95%

Display Example



Range 800m

Fish-school of sardines at the surface
Approx. 100 tons
Fish-school volumes and densities are clearly visible.



Range 800m

Shoal of sardines at the surface
Approx. 15 tons
Distribution and spread of small fish-schools are clearly visible

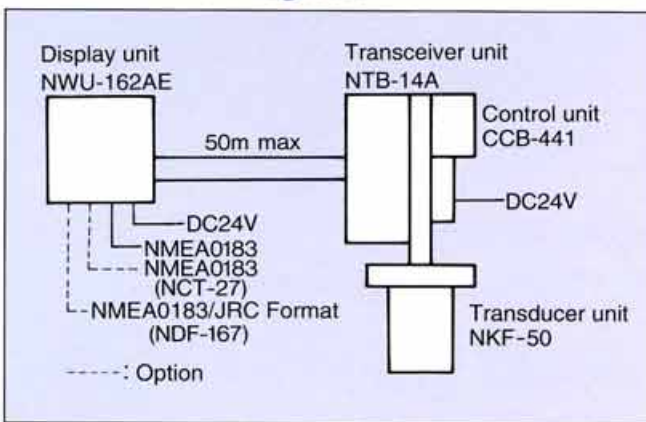
Standard Components

Description	Model	Q'ty	Weight	Power Supply	Remarks
Display unit	NWU-162AE	1	28kg	DC24V 100W	Spare parts 6ZXBS00168 Instruction Manual 6ZPBS01606
Transducer unit	NKF-50	1	110kg	DC24V 300W (Max.59A at start of hoisting)	Including CCB-441 Control unit
Transceiver unit	NTB-14A	1	25kg		Incorporated in NKF-50

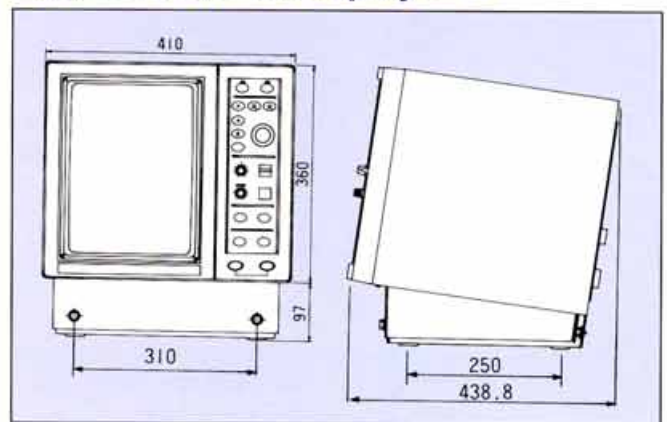
Options

Description	Model	Remarks
Infrared remote control	NCH-425	Not Available Now
Gyrocompass Interface	NCT-27	Speed Log/Gyro inputs interface
Navigation Interface	NDF-167	Depth/Temp. inputs interface

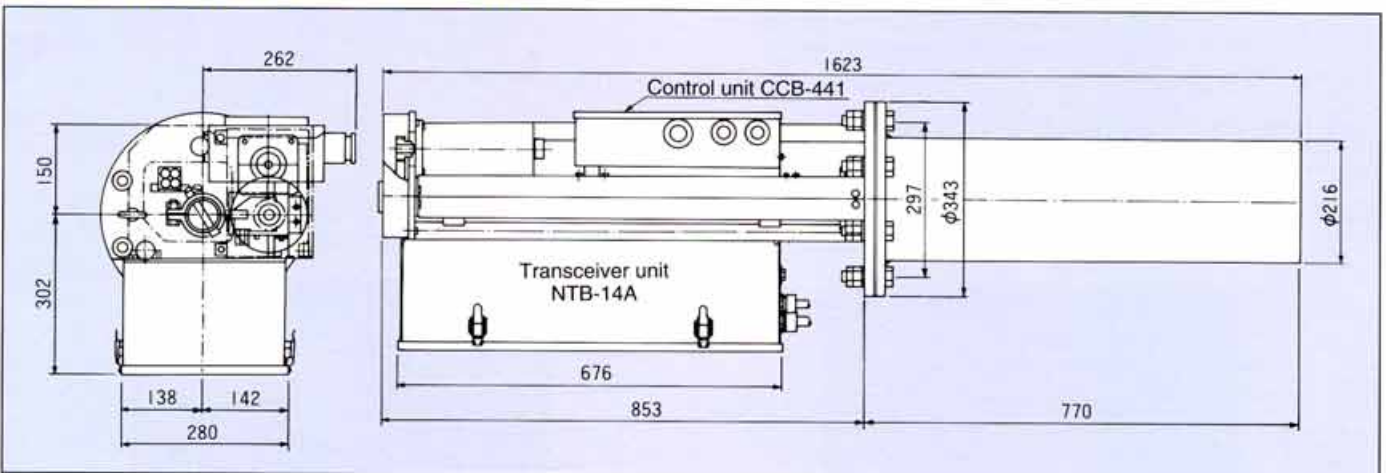
Schematic Diagram



Dimensions of Display unit



Dimension of Transducer unit



* Design and specifications may be subject to change without notice.

For further information, contact:

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Since 1915 JRC Homepage <http://www.jrc.co.jp/>

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FM 30249



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