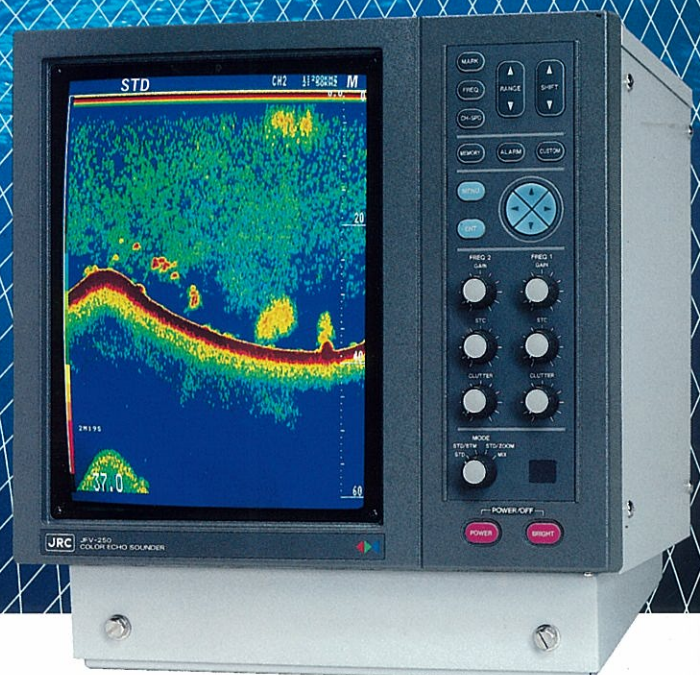


JRC COLOR ECHO SOUNDER

JFV-250

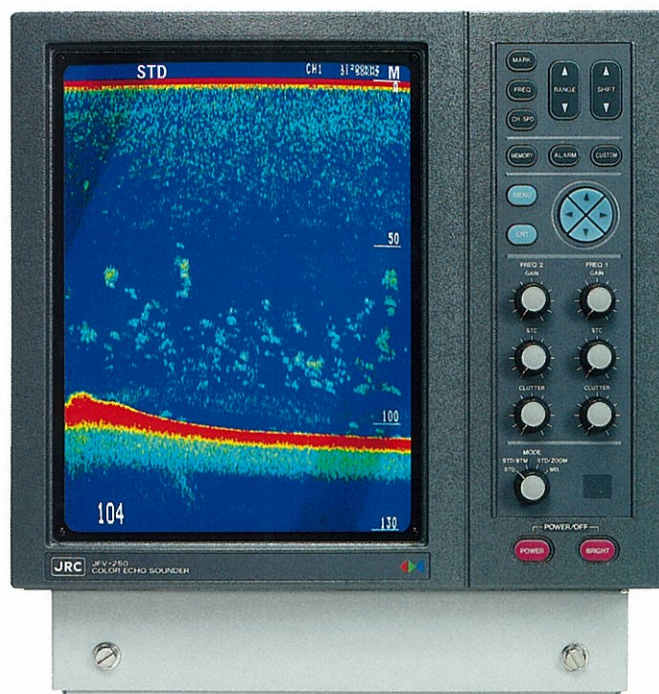
*Clearer, More Detailed Fish Image
On High-Resolution Display*



Even Surface and Bottom Fish Distinctly Displayed

The JFV-250 is a 14-inch highresolution color echo sounder using the most up-to-date ultrasonics and microcomputer technology based on JRC's professional experience in fishing electronics.

The newest model of the JFV series features a new transducer, highresolution color display, ease of operation and other advanced functions that are most convenient for fishing operations.



FEATURES

Clear Display

- The 14-inch color display has a higher resolution of 640×480 dots than the conventional models, offering more precise, clearer images with higher definition.
- Color display is selectable from 6 sets of 16 colors, 2 sets of 8 colors, one set of 16 or 8 user-specified colors, and monochrome. Background color is selectable from 4 colors.
- The 16-color display presents fine, precise echo images, enabling fish density presumption. The user color set can be specified to highlight desired echoes depending on the fish types or the fish ground.

Simple Operation

- Simplified arrangement of switches and controls on the operating panel. The function keys and switches that had been rarely used has been eliminated.
- Display modes can easily be changed by switches.
- Additional functions can be selected from menu display and executed by one-touch key-in operation.
- By pushing "CUSTOM" key, the display easily returns to the mode normally used.

Sharp Display of Surface Fish and Bottom Fish

- Even tiny fish or small fish schools in the surface layer or on the sea-bed can be clearly discriminated.
- Tiny fish among planktons in the surface water can be clearly detected and distinctly displayed by the FM pulse beam transmission technique unique to JRC.
- The high power output of 10kW (option) is suited for deep sea sounding.
- A 16-color display with bottom enlargement enables sharp discrimination of bottom fish schools from the sea-bed.

VARIETY OF FUNCTIONS

A-Scope Display

Fish echoes are clearly displayed in 16 colors with echo signal intensity.

Fish Type Definition

The dual-frequency mode is suitable for fish type definition.

Water Temperature Graph (with Alarm)

A water temperature graph can be displayed with a fish echo display on the same screen by using an optional water temperature sensor.

4-Screen Image Memory

Up to 4 pictures can be stored in the internal memory for recording of fish ground spots.

Video Compression

Echo images for up to 4 hours can be displayed in a compressed mode on a single screen.

Ship's Position Display (Option)

The ship's position can be indicated on the screen by connecting an optional GPS sensor.

Wireless Remote Control (Option)

An wireless remote control unit is optionally available.

SPECIFICATIONS

Display type:	14-inch high-definition color CRT with a resolution of 640×480 dots
Color display:	Selectable from 6 sets of 16 colors, 2 sets of 8 colors, one set of 16 or 8 user-specified colors and monochrome, and 4 background colors
CRT brightness:	Variable from push button
Display modes:	Standard (full screen) Dual-split (vertical or horizontal) Partial enlargement (single/dual-frequency) Bottom lock enlargement (single/dual frequency) Dual frequency mix mode Temperature graph *1, bottom hardness (BH) graph, water depth graph A scope-at the right side of display
Power supply:	20 to 45 VDC (24 V/32 V)

Echo Sounding Functions

Echo Display range

Manual:	Six (6) ranges presettable from keyboard or continuously variable by Up and Down keys in the sounding ranges: Standard 10-3000 meters Partial 5- 500 meters Bottom lock 1- 100 meters
Auto:	Automatically set so as to display the sea bottom within the range
Shift	
Manual:	Presettable from push button, 0 to 1500 units
Auto:	Automatically set so as to display the sea bottom within the shift
Depth unit:	Metres, fathoms, feet and any other selectable value unit
Depth marker:	Marker scale with alphanumeric readings at the right end of display
Bottom depth:	Numerical indication on display
Cursor:	Horizontal-depth (same as VRM) Vertical-time or distance *2
Alarms	
Fish:	Adjustable in the normal maximum range+1500 units in threshold level

Water temp.:	Adjustable from -5° to +40°, or by parameters from push button *1
Image memory:	4 frames of pictures
Compressed mode:	Display time selectable from 15 min, 30 min, 1hr, 2 hrs and 4 hrs
Distance/Time mark:	Distance 0.1 nm-steos; time 1-min steps *2
Interference rejection:	Adjustable in three steps and off, or by fine adjustment of sounding rate or frequency
Draft control:	Presettable in 0.1 unit from 0 to 20 units via menu
Scan speed:	Normal 2/1, 1/1, 1/2...1/8 or scans/sounding synchronized log *3
Frequencies:	200/75/50/28kHz, single or dual
Transmitter power:	Selectable from 1kW, 3kW, 5kW(option), 10kW(option). 5kW/10kW needs an high-power transmitter unit

Other Functions

(Note: The CQD-1185 Terminal Board is needed for connection with optional equipment except for GPS and water depth sensors and RGB output.)

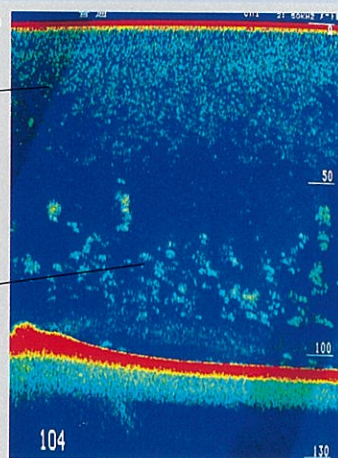
Depth data	output: NMEA0183 or JRC format and NDF-167 navigational interface
Net sonde input:	Provided
Fish echo signal	
video output:	RGB output
Video monitor:	Up to 2 units connectable
Position, water temp.	
input:	NMEA0183 format, 1CH each
Water temp interface :	Included (for CHG-97)
Notes:	*1 With water temp. data input or sensor connected. *2 Distance with log or navigator connected. *3 With log or navigator connected.

DISPLAY EXAMPLES

200kHz Standard Mode

Planktions

Tiny fish

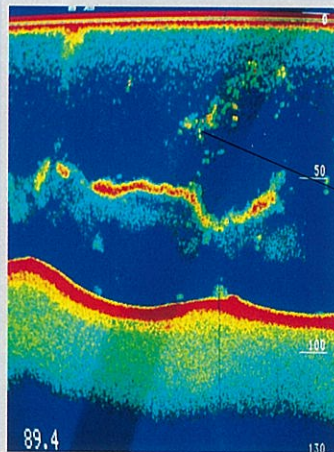


Clearly display even weak echoes from squids among planktons in the middle layer.

50kHz Standard Mode

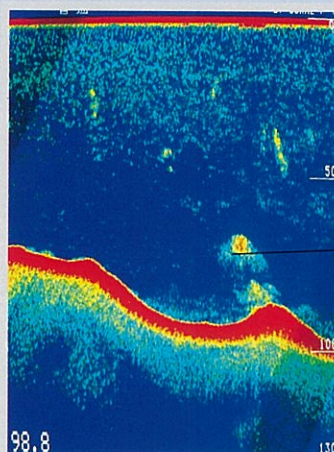
Small fish schools

Displays movements of small fish schools distributed.



200kHz Standard Mode

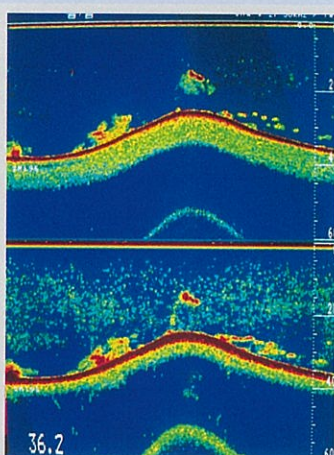
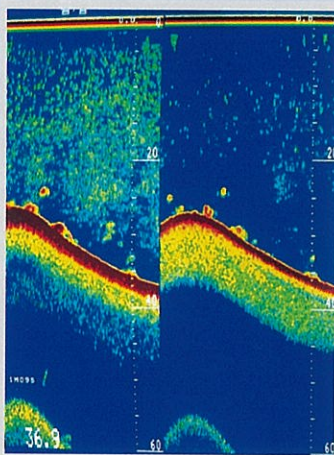
Bottom fish



200/50kHz Dual-split

Fine, natural display of shallow water (60m deep) on high resolution CRT monitor.

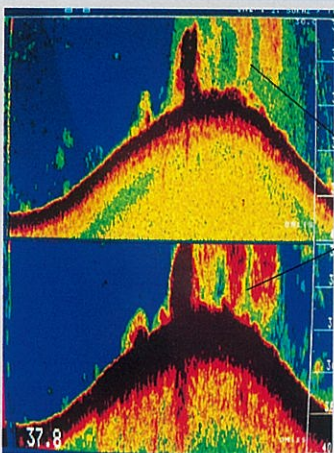
(Vertical)



(Horizontal)

200/50kHz Dual-split with partial enlargement

Bottom fish

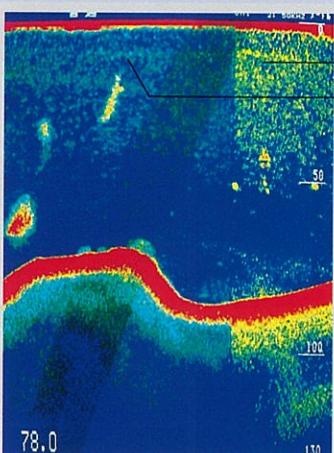


200kHz Standard mode

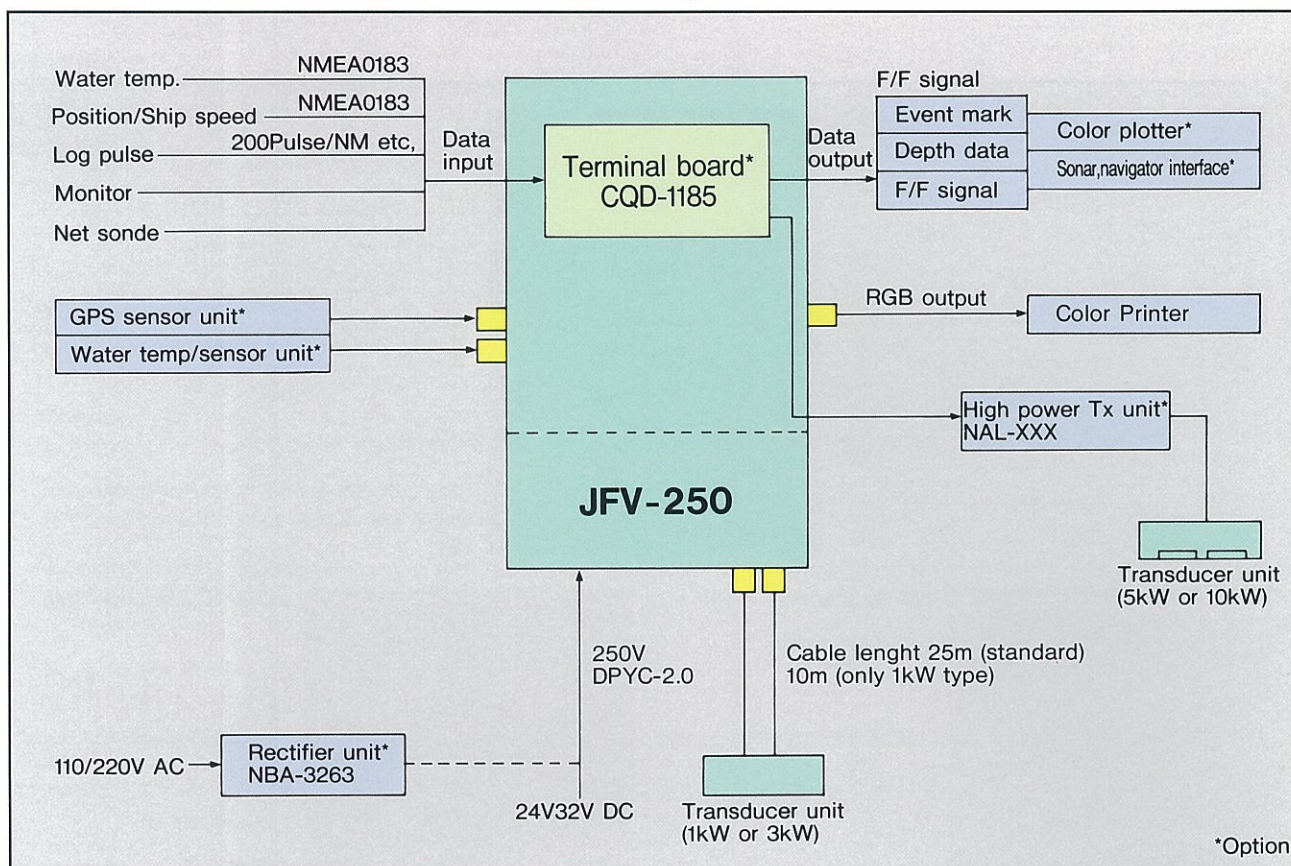
ADC Mode ⑥
ADC Mode ③

ADC mode: Color gradations selectable for echo intensities.

Nois rejection in surface and underwater layers full of planktons and pollutants.



SYSTEMS DIAGRAM



FREQUENCY/OUTPUT POWER LIST

Output Power	1kW				3kW				5kW			10kW	
Frequency (kHz)	200	75	50	28	200	75	50	28	75	50	28	50	28
Transmitter	Internal								High Power Tx Unit (option)				
Transducer Unit	Single Frequency				Selectable Single or Dual Frequency								

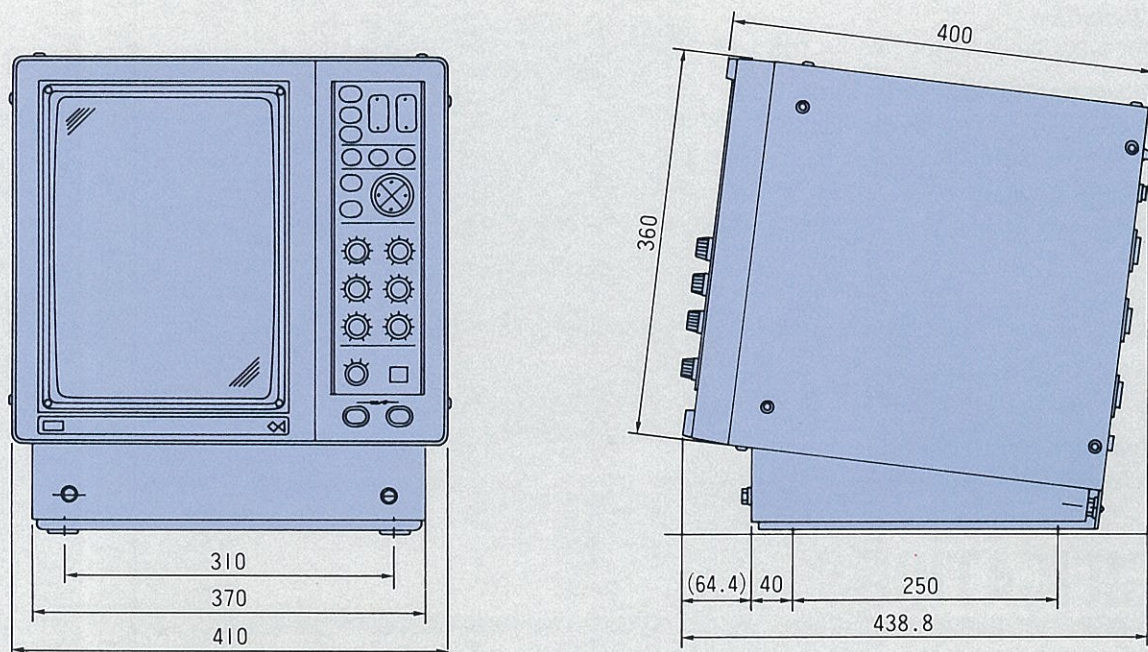
STANDARD COMPONENTS

Item	Model	Q'ty	Remarks
Echo Sounder	JFV-250	1	With vinyl cover
Transducer Unit	NKP-□□□□	1	□: metal fittings marks of frequency and output power
Spare Parts	6ZXBS00167	1 set	
Instruction Manual	6ZPBS02549	1 copy	

OPTION

Item	Model	Remarks
High Power Tx Unit	NAL-050	5kW
	NAL-100	10kW
	NAL-505	5/5kW
	NAL-510	5/10kW
	NAL-999	10/10kW
Terminal Board	CQD-1185	For optional unit (Excl. GP and water temp. sensor)
Rectifier Unit	NBA-3263 or NBA-3747A	Input: 100/110/220V AC Output: 24V DC, 6A
Water Temp. Sensor	CHG-97	
GPS Sensor	GPS100	
DGPS Sensor	DGPS200	
Color Printer	NJW-163	A4 size

DIMENSIONS



Weight: Approx. 28kg

Specifications subject to change without notice

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