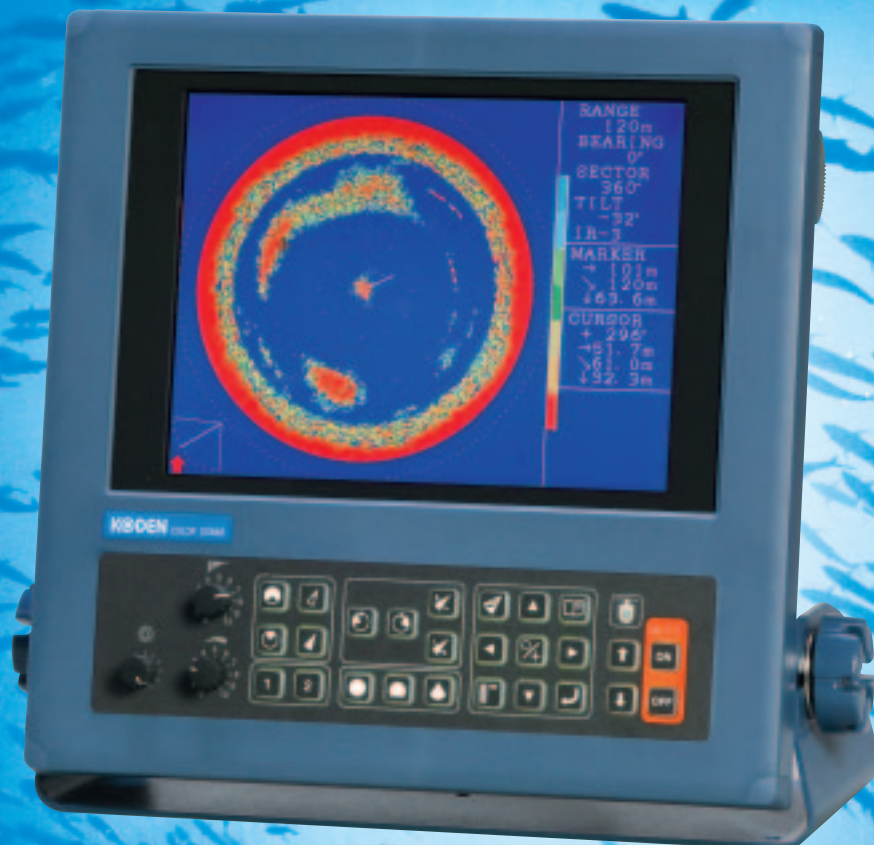


KODEN

10.4-inch Color LCD
Sonar

ESR-140

Affordable professional sonar
Compact design for easy installation



FEATURES

Easy Installation

Brilliant color LCD flat screen allows for installation anywhere, and with built-in flush mounting system installation is easy. You simply install screws at 4 corners from front side and cover with included screw covers. Plus the hoist/lower unit is made small and light-weight for easy carrying and installation.

High-speed Searchlight Sonar

The high-speed Searchlight Sonar beam scans sectors horizontal and vertical to search up to a 360 degree area around your vessel. This gives you optimum performance as the searching time is reduced and search omission is prevented to improve the operation efficiency.

Stabilizer function included in standard equipment

The performance of fish detection is improved by automatically correcting the direction of transducer affected by the boat fluctuation. Upper class functions are included in standard equipment.

Easy to operate switches

Set by turning knob and operate by pushing buttons. The simplified operation is accomplished by categorizing the operation system.

Target-lock function

With this lock function, the azimuth and the elevation angle of the beam are controlled automatically to always display the targeted fish school on the screen.

Ring marker and cross cursor

The distance to the fish school is accurately measured by the ring marker, and the distance and azimuth by the cross cursor.

Automatic storing of hoist/lower unit

By setting the boat speed in advance, when the boat speed exceeds the setting value, the transducer unit is stored automatically in order to prevent damages.

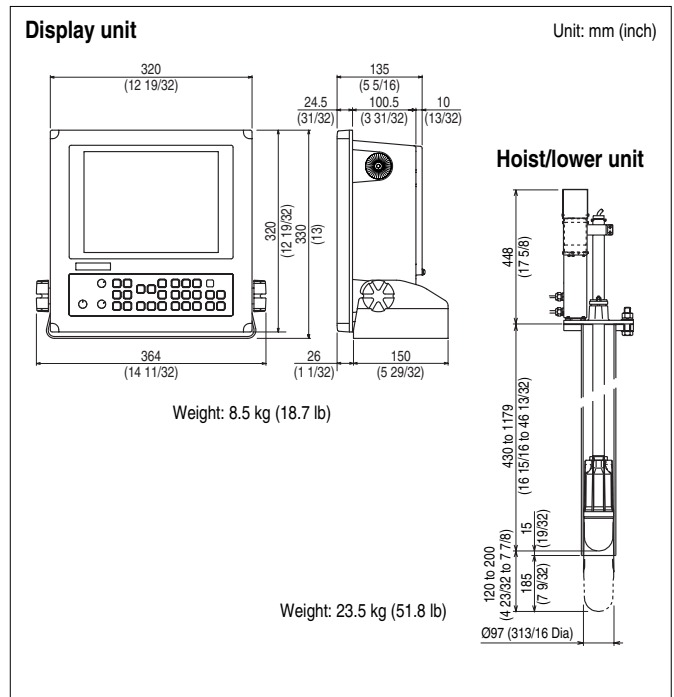
SPECIFICATIONS

Display size/type	10.4-inch color LCD	
Display resolution	640 x 480 pixels	
Output Frequency	200 kHz	
Output power	800 W	
Tilt angle	+5° to -90° (variable with 1° step)	
Hoist stroke	120 to 200 mm	
Presentation colors	8 image colors (selectable from 4096 colors on color palette)	
Display mode	Sonar, Off center, Bottom scan	
Off-centering	Fore, Back, Left, Right (Movable 50% of radius from the center of effective screen)	
Target lock	Horizontal, Horizontal + vertical, Automatic track, Automatic track with tilt control	
Distance unit	Meter, Fathom, I. fathom, Feet	
Scanning range	0 to 300 m, 0 to 200 fathom / I. fathom, 0 to 1000 ft	
Scanning sector angle	Sonar mode	5° step: 5° 25° 45° 85° 125° 165° 205° 360° 10° step: 10° 30° 50° 90° 130° 170° 210° 360°
	Bottom scan mode	3° step: 3° 27° 45° 63° 93° 117° 147° 177° 5° step: 5° 25° 45° 65° 95° 115° 145° 175°
360° scanning time (extracts)	Scanning range (m)	10 40 80 100 160 200 300
	Scanning time (sec)	5° step: 4.2 7.1 10.9 12.8 18.6 22.4 32.0 10° step: 3.7 5.1 7.0 7.0 10.9 12.8 17.6
Input data format	NMEA 0183	
Other functions	TVG (4 types), Pulse selection (3 types), Color rejection, Power reduction (2 levels), Compass display	
Power supply	20 to 30 VDC (80 W at 24 VDC)	

EQUIPMENT LIST

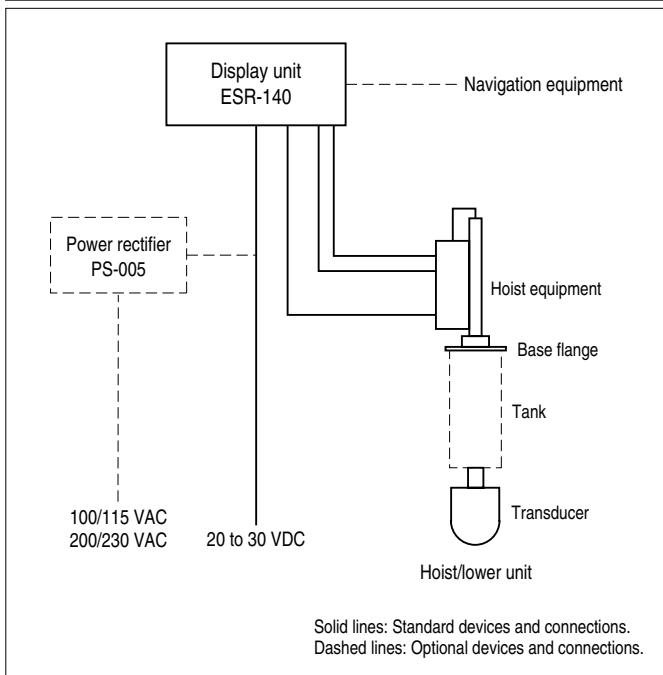
Standard equipments	Display unit	1
	Hoist/lower unit	1 set
	DC power cable, Connecting cable	1 set
	Installation materials, Spare parts, Operation manual	1 set
Options	PVC tank unit, FRP tank unit, Pipe guide and water-proof packing for FRP tank, Power rectifier, NMEA input cable, Trigger output cable	

DIMENSIONS AND WEIGHT



• Design and specifications are subject to change without notice.

CONNECTIONS

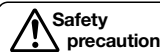


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To ensure proper and safe use of the equipment, please carefully read and follow the instructions in the Operation Manual.

For details, please contact: