



ESR-140



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 lightweight 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.

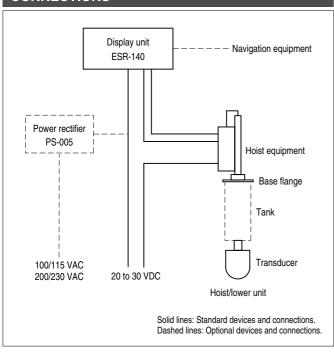
Ring marker and cross cursor

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.

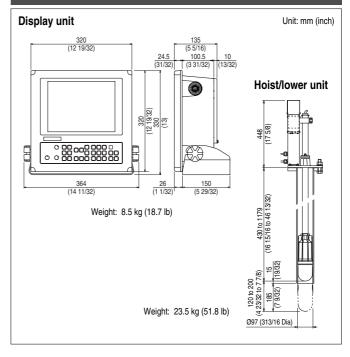
CONNECTIONS



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	Sonar			
sector		10° step: 10° 30° 50° 90° 130° 170° 210° 360°		
angle		3° step: 3° 27° 45° 63° 93° 117° 147° 177°		
	mode			
360° scanning				
time		5° step: 4.2 7.1 10.9 12.8 18.6 22.4 32.0		
(extracts)		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 rejec-		
		tion, Power reduction (2 levels), Compass display		
Power supply		20 to 30 VDC (80 W at 24 VDC)		

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

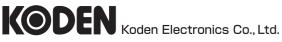
DIMENSIONS AND WEIGHT



• Design and specifications are subject to change without notice.

To ensure proper and safe use of the equipment, please carefully

read and follow the instructions in the Operation Manual.



Tamagawa Office: 2-13-24 Tamagawa, Ota-ku, Tokyo, 146-0095 Japan Tel: +81-3-3756-6501 Fax: +81-3-3756-6509 5278 Uenohara, Uenohara-shi, Yamanashi, 409-0112 Japan

Tel: +81-554-20-5860 Fax: +81-554-20-5875

overseas@koden-electronics.co.ip

precaution For details, please contact:

Safety