

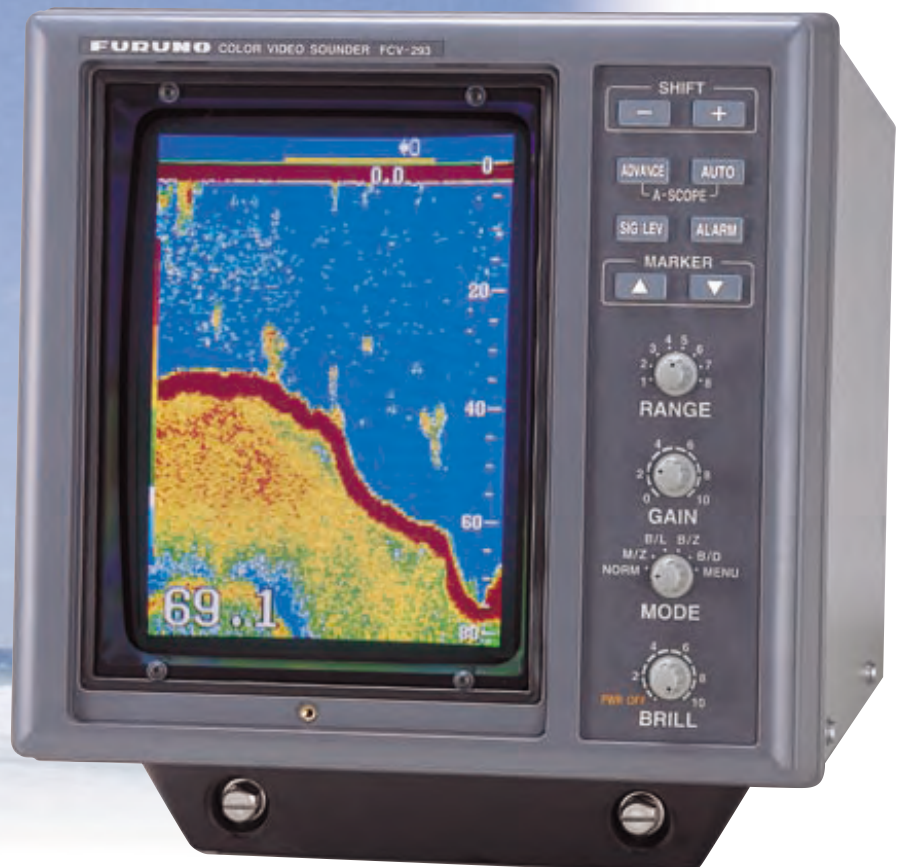
FURUNO®

10" color CRT with multi-mode selection

COLOR VIDEO SOUNDER

Model FCV-293

- Choice of 50 or 200 kHz Transducer
- Two Asian language options are available in Chinese or Thai for operation panel (Please specify when ordering)
- Echo presentation in 16 colors or high-contrast amber for nighttime operation
- Versatile display modes: Marker Zoom, Bottom Zoom, Bottom Discrimination, Bottom-Lock and A-Scope
- Audible alarms for preset water depth and fish echoes
- Automatic control of range for hands-off operation



FURUNO ELECTRIC CO., LTD.

Catalogue No. E-393a

TRADE MARK REGISTERED
MARCA REGISTRADA

Straightforward design and professional quality ensure effective fishing operation



The FURUNO FCV-293 is a cost-effective color video sounder for a variety of fishing vessels. The echoes are presented on the 10-inch screen in 8 or 16 colors as selected on the menu. One of the colors can be displayed in white to emphasize the specific echo level. A monochrome amber presentation is also available for nighttime operation.

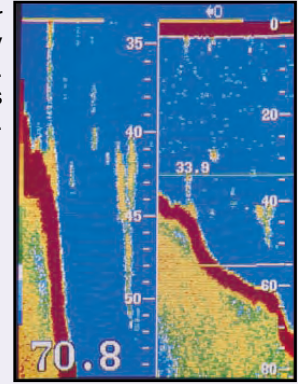
There are a variety of display modes including Normal, Marker Zoom, Bottom-Lock, Bottom Discrimination, Bottom Zoom and A-scope. The Bottom Discrimination mode enhances the bottom echo tails to easily discriminate between soft, rocky or sandy bottom by change in color.

Selection of sounding range, sensitivity, phasing, display mode and other settings are simple and direct with keys or rotary controls at the right of the screen. The language for the control names on the operation panel is selected from English, Chinese or Thai (specify when ordering).

The FCV-293 offers hands-off operation. When the operator selects the Auto mode, the video sounder automatically gets a right range scale and tracks the seabed whether the depth changes in the course of sailing.

MARKER ZOOM

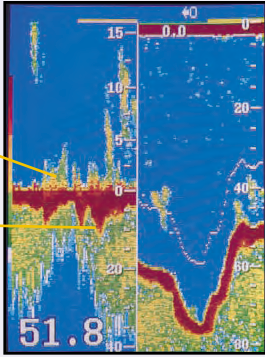
Selected part of water column can freely be set by moving the zoom markers. The zoomed picture appears on the left half of the screen.



Zoom Markers

BOTTOM DISCRIMINATION

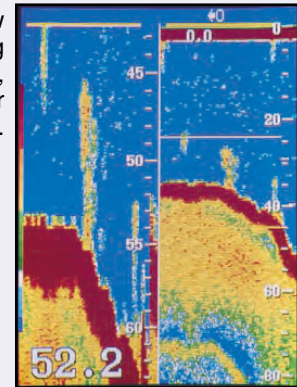
Bottom fish
Longer Bottom Tails (area of hard bottom)



The bottom is displayed as a straight line (left half). Echoes immediately below this line will have enhanced bottom tails. Harder bottom creates darker and longer tails. The nature and any changes in bottom hardness can be easily determined by a change in color or tail lengths.

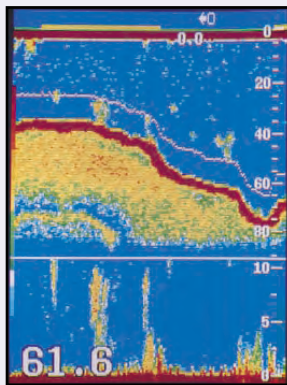
BOTTOM ZOOM

The zoom markers follow the bottom contour showing an expanded view of bottom, whether the bottom is flat or rugged.



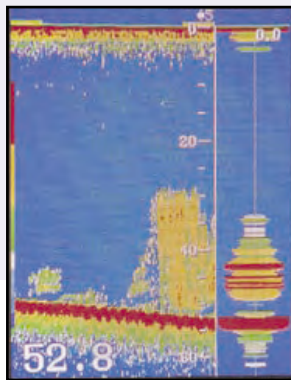
Zoom Markers

BOTTOM-LOCK



The bottom is displayed as a straight line on the lower part of the screen, regardless of bottom contour. This mode is useful for detection of fish close to or on the bottom.

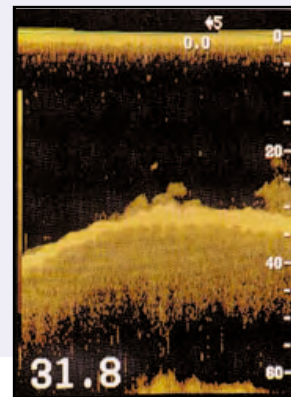
A-SCOPE



The A-Scope picture on the right 1/3 of the screen shows an instantaneous echo envelope at each ping, clearly showing echo differentials and positional relationship. This is useful for closer observation of target depth.

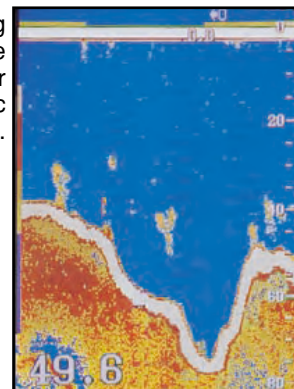
CHANGE OF DISPLAY COLOR

Background color can be changed in the Menu for optimum viewing in any environment. A monochrome amber presentation is also available.

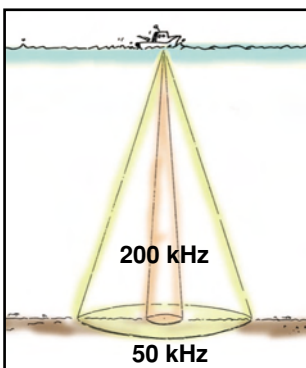


ECHO COLOR CHANGE

One of any colors among the color bar can be replaced with white color to emphasize the specific echo level.



The difference of sounding between 50 kHz and 200 kHz



Transducer options are offered in 200 kHz or 50 kHz. The 200 kHz is advantageous to find fish in shallow water or to discriminate fish from water contamination. It is suitable in most echo sounding over the continental shelf. The 50 kHz transducer is recommended for deeper range fishing or detecting if the bottom conditions are soft or hard.

SPECIFICATIONS OF FCV-293

Display 10-inch color CRT, 8 or 16 colors, 232(H) x 240(V) pixels, 160(W) x 200(H) mm

Display Modes Normal, Marker Zoom, Bottom-Lock, Bottom Discrimination, Bottom Zoom and A-scope

Frequency 50 or 200 kHz

Beamwidth 50 kHz (50B-6B): 28°
200 kHz (200B-8B): 5.4°

Basic Range

m	5,	10,	20,	40,	80,	150,	300,	500
ft	15,	30,	60,	120,	200,	400,	1000,	1500
fa	3,	5,	10,	20,	40,	80,	150,	250
p/b	3,	5,	10,	20,	40,	80,	150,	250

(Range scales can be selected from 5 to 4,000 m in Menu)

Zoom Range 10-200 m (set on menu)

Bottom-Look Range 2, 5, 10 m

Phased Range Up to 4,000 m in 1 to 100 m steps depending on selected range

Pulselength and Pulse Repetition Rates

Range (m)	5-20	40	80	150	300	500
P/L (ms)	0.1	0.2	0.4	0.7	1.5	2.0
PRR (pulses/min)	750	375	187	110	50	38

Picture Advance Freeze, 1/16, 1/8, 1/4, 1/2, 1/1, 2/1

Output Power 1 kW or 2* kW rms *for deep sounding

POWER SUPPLY

12 - 24 VDC
115/230 VAC with optional rectifier PR-62

ENVIRONMENT (IEC standards)
Display Unit Temperature: -15°C to +55°C (IEC 60945)
Waterproofing: IPX2 (IEC 60529)

EQUIPMENT LIST

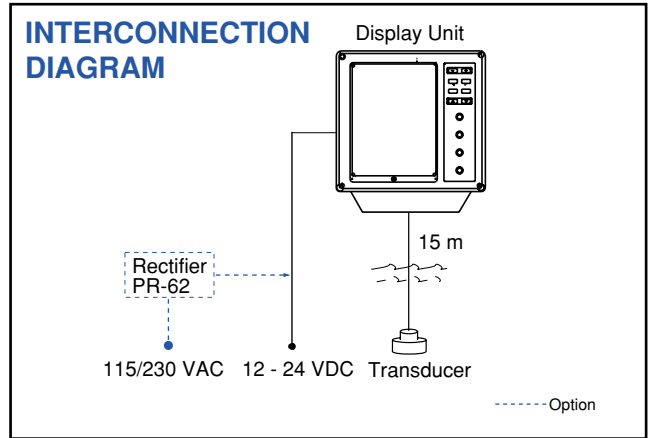
Standard

- Display Unit: FCV-293E (for English panel) 1 unit
FCV-293C (for Chinese panel)
FCV-293T (for Thai panel)
- Installation Materials and Standard Spare Parts 1 set

Optional

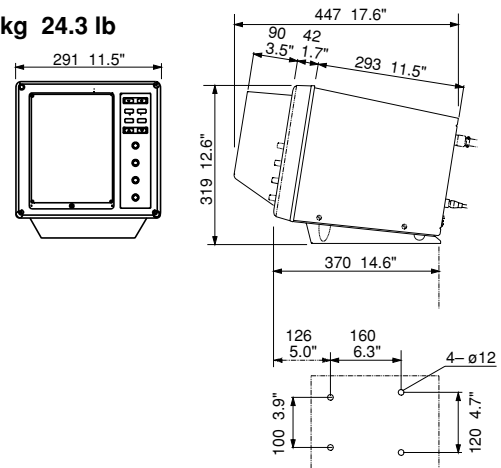
- Rectifier PR-62 for 115/230 VAC mains
- Flush Mount Kit OP03-90 for display unit
- Transducer (Specify the frequency and type of transducer)

1 kW:	50B-6	(50 kHz, with 10 m cable)	
	50B-6B	(50 kHz, with 15 m cable)	
	50B-9B	(50 kHz, with 15 m cable)	
	200B-5S	(200 kHz, with 15 m cable)	
	2 kW:	50B-12	(50 kHz, with 15 m cable)
		50BL-12**	(50 kHz, with 15 m cable)
**Bolt-Clamped Langevin type (for detection of small fish)			
200B-8	(200 kHz, with 10 m cable)		
200B-8B	(200 kHz, with 15 m cable)		



Display Unit

11 kg 24.3 lb



Transducer

50B-6/6B
3 kg 7.6 lb

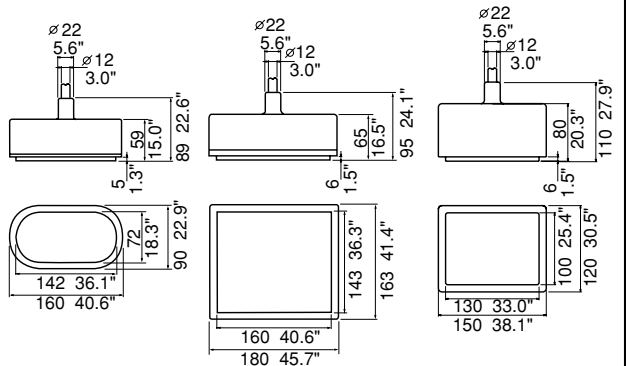
200B-5S
2.5 kg 6.4 lb

200B-8/8B
3.6 kg 9.1 lb

50B-9B
5 kg 12.7 lb

50B-12
7.5 kg 19.1 lb

50BL-12
5.2 kg 13.2 lb



SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

03043Y Printed in Japan

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