

FURUNO®

Sector and Full Circle Scanning Sonar Black Box Searchlight Sonar Model CH-250BB

- Choice of frequency: 60, 88 or 150 kHz
- Select virtually any size non-interlaced, VGA or higher PC monitor CRTs, as well as flat panel color LCDs (VGA – 640 x 480)
- Target lock on a fish school or L/L position of a designated fishing area
- Pulse length automatically switched with range to optimize overall performance
- A specific color can be shown in white to enhance the echo level display
- Instant selection of eight different operational modes
- Displays echoes in 8 or 16 colors
- Audible target detection freeing the operator from a continuous display watch
- Shared monitor utilization of Radar and PC systems with standard PC monitor switching system
- “All Glass”, balanced and symmetrical bridge layout when multiple equivalent PC monitors are employed
- Sonar video distribution to a vessel’s television system, or multiple external monitors is possible with standard PC monitor converters and distributors



The CH250BB gives you the flexibility to select the type of display you want, and the capability to switch between other Furuno "Black Box" products.



SPECIFICATIONS OF CH-250BB

1. Range Scales and Pulse Length

150 kHz

Range	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Meters	10	20	40	60	80	120	160	200	250	300	400	500	600	800	1000
Feet	40	80	120	200	300	400	500	600	700	800	1000	1500	2000	2500	3500
Fathoms	10	20	40	60	80	100	120	140	160	200	250	300	400	500	600
P/B	10	20	40	60	80	100	120	140	160	200	250	300	400	500	700
Time to train full circle	7	7	7	7	7	10	12/13	14/16	16/20	18/24	22/32	26/40	30/48	38/64	46/81

Max scale depends on the system frequency. 1600 m (60 kHz), 1200 m (88 kHz), 1000 m (150 kHz).
Training speed is subject to the system frequency and range scales. Two speeds on long range scales.

2. Display Modes

1. Full circle searchlight
2. Zoom (x 1.5)
3. Vertical-fan scanning
4. Vertical sounding
5. Full circle search and Vertical scan
6. Full circle search with Historical display
7. Semi circle search and Strata display
8. Full circle search and Video Plotter

3. Color 8 or 16 colors, plus white

4. Audio monitor 1000 Hz

5. TX Output Power 0.8-1.2 kW

6. Beamwidth (at -3 dB)
 60 kHz 15° (H) x 12° (V)
 88 kHz 11.5° (H) x 9.5° (V)
 150 kHz 6.5° (H) x 6.5° (V)

7. Transducer Control

Tilt 0° to -180° at 3° or 6° steps (in vertical scan)
 +5° to -90° at 1° steps (in full circle scan)

Training sector

Manual or automatic training at 6° or 12° steps
 in search sector of 6°-360°

Target Lock By L/Lor Echo position

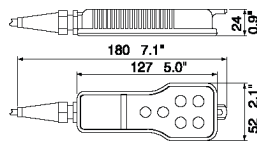
8. Interface NMEA0183 Ver. 1.5, 2.0 (IEC 61162-1)
 Input: DBS, DBT, DPT, GGA, GLL, HDG, HDM, MDA, MTW, RMA, RMC, VDR, VHW, VTG
 Output: TLL

POWER SUPPLY

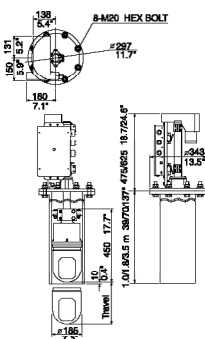
Display/Control unit 12-32 VDC, 55 W
 Hull unit 12 or 24/32 VDC, 55 W
 (200 W while raising/lowering transducer)

REMOTE CONTROLLER (OPTIONAL)

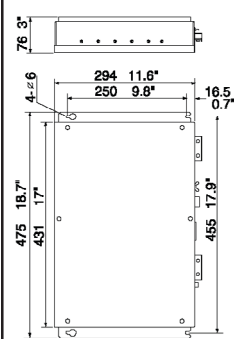
CSH-256
 Weight 0.3 kg, 0.7 lb



HULL UNIT
CSH-254 (Travel 400 m) 43 kg, 94.8 lb
CSH-255 (Travel 250 m) 42 kg, 92.6 lb



TRANSCIVER UNIT
CSH-253
 Weight 3.2 kg, 7.1 lb



EMC AND ENVIRONMENT

Complies with IEC 60945
 Display Unit: -15°C to +55°C
 Water Resistance: IEC IPX5

EQUIPMENT LIST

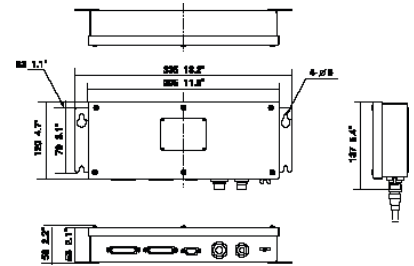
Standard

- | | |
|---|--------|
| 1. Control Head CH-252 | 1 Unit |
| 2. Hull Unit CH-254 (travel 400 mm) or CH-255 (travel 250 mm) | 1 Unit |
| 3. Transceiver unit CH-253 | 1 Unit |
| 4. Installation materials and spare parts | 1 Set |
| 5. Interface box IF-8000 | 1 Unit |
| 6. Motion sensor MS-100 or Clinometer BS-7004 | |

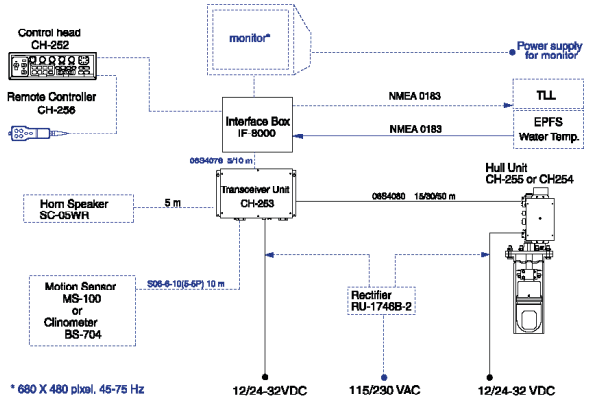
Optional

1. Non-Interlaced, Multi-sync PC Monitor (VGA 640 x 480)
2. Remote controller CH-256
3. Rectifier RU-1746B-2
4. External Speaker
5. 1 m tall steel tank,
 1.8 m tall steel tank,
 3.5 m tall steel tank,
 1 m tall FRP tank,
 1.8 m tall FRP tank,
 1 m tall aluminum tank
6. NMEAcable

INTERFACE UNIT IF-8000



INTERCONNECTION DIAGRAM



SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE