

## SPECIFICATIONS OF CH-250BB

## 1. Range Scales and Pulse Length

| 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

|                     |                      |
|---------------------|----------------------|
| <b>6. Beamwidth</b> | (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

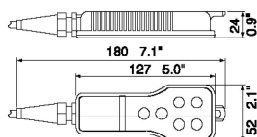
**Interface** NMEA0183 Ver. 1.5, 2.0 (IEC 61162-1)  
**Input:** DBS, DBT, DPT, GGA, GLL, HDG, HDM, MDA, MTW, RMA, RMC, VDR, VHW, VTG  
**Output:** TLL

## POWER SUPPLY

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

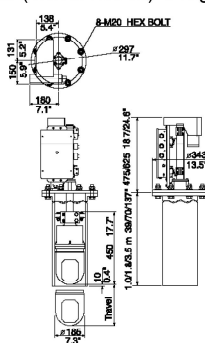
**REMOTE CONTROLLER (OPTIONAL)**

**CSH-256**  
Weight 0.3 kg, 0.7 lb



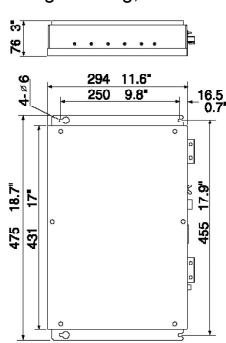
## HULL UNIT

**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:  $-15^{\circ}\text{C}$  to  $+55^{\circ}\text{C}$

Water Resistance: IEC IPX5

## EQUIPMENT LIST

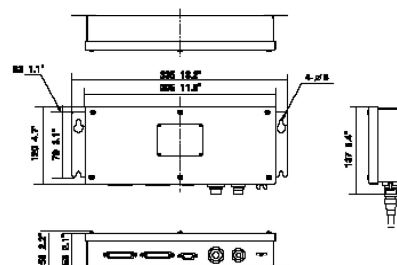
## Standard

- |                                           |                                                     |        |
|-------------------------------------------|-----------------------------------------------------|--------|
| 1. Control Head                           | CH-252                                              | 1 Unit |
| 2. Hull Unit                              | CH-254 (travel 400 mm) or<br>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                        |        |

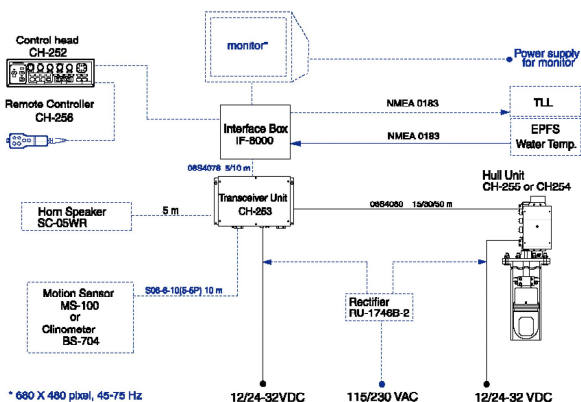
### Optional

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