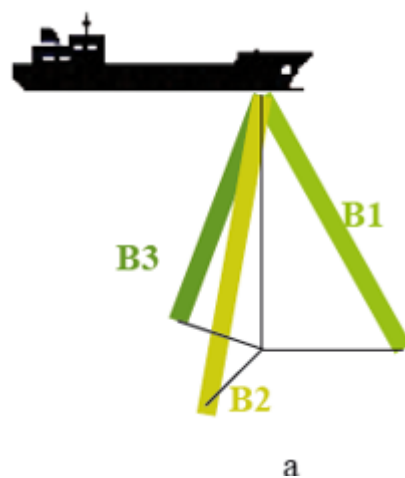# DL850 Temperature compensation

If a speed error of some knot is observed in an area it is possibly caused by an effect of different temperature in the water.
It is possible to remove or reduce this effect by introducing a temperature compensation in the calibration.
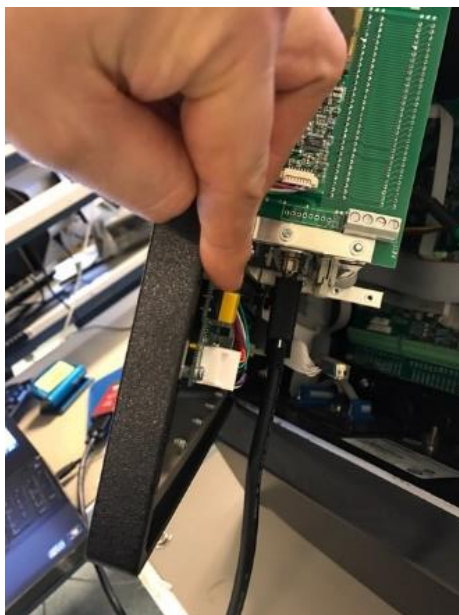
The DL850 speed log will calculate the speed by use of acoustic signals being transmitted in a 30deg angle from vertical. This angle will slightly vary depending on temperature.

DL850 software version 4.03.04 and higher includes an optional temperature compensation. Described in appendix 4 in the manual.

Procedure
Goto "Screen calibration", "Menu 4".

Press and hold the hidden button until 3 beeps are heard. (There is a long pause between beep 2-3)

```
Surface sound speed    Average Sound speed  Xducer type  Salinity  Beam Angle
  1523m/s (auto)           1523m/s (auto)        off         35      29.0° (fix)
                                                                   Averaged drift
     Measured speed              Calibrated speed                     26.5°
  1.9kn     0.9kn      25.2°    1.9kn    0.9kn     24.9°   Trip BT
  0.1kn    -0.2kn     -73.3°    0.1kn   -0.2kn    -73.3°       0.00NM
  _____
                        Screen   calibration

   ┌─────────┐ ┌─────────┐ ┌─────────┐ ┌─────────┐ ┌─────────┐ ┌─────────┐
   │    4    │ │   off   │ │         │ │         │ │  auto   │ │  auto   │
   │  MENU   │ │XDUCER CON│ │         │ │         │ │SOUND SURF│ │SOUND AVER│
   └─────────┘ └─────────┘ └─────────┘ └─────────┘ └─────────┘ └─────────┘
```

Set "XDUCER CON" to "A/B".

The temperature compensation will now be fit to the sensors part number ending on -SA, -LA, -SB and -LB.

Please note that a new speed calibration, or a fine tune of the existing calibration, may be required after this set change.