

# VALEPORT

This document certifies that the instrument detailed below has been calibrated according to Valeport Limited's Standard Procedures, using equipment with calibrations traceable to UKAS or National Standards.

Calibration Certificate Number: 43900

Instrument Type: Altimeter

Instrument Serial Number: 53821

Calibrated By: J.Harper

Date: 28/01/2016

Signed:



Full details of the results from the calibration procedure applied to each fitted sensor are available, on request, via email. This summary certificate should be kept with the instrument.



Instrument Serial Number	53821
Sensor Type	500kHz Neptune
Altimeter Range (m)	100m
Certificate Number	43900

**Stage 1**

Test the assembled altimeter in a body of water to ensure a signal is received at the minimum range. Taking direct readings from the unit immerse the head till it is roughly 0.1m from the bottom, readings should come through - if not then the signal is being saturated and there is a problem

To inhibit spurious readings set using: #226;40

	Pass/Fail
Bench Test Min Range <0.1m	Pass

**Stage 2**

Using a mini SVS or similar, measure the average sound velocity for the water in the tow tank and input the value in the cell below.

Enter the SOS	1481.712
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Input SOS value to the altimeter using: #830;1481.7120

**Stage 3**

Fit the altimeter into the calibration fixture and lower the assembly into the tank till it is about 0.5m down facing the far end of the tow tank and clamp in place. Using the distance markers on the wall align the front edge of the trolley with the datum line to set the front of the altimeter at stated distance from the wall.

To determine the Range Offset		
Distance m	Measured Range m	Measured Offset m
1	1.018	-0.018

**Stage 4: Enter the Offset Correction**

#828;-0.0180

Stage 5 - Range Check after Offset Correction			
Distance m	Measured Range m	Measured Offset m	Pass/Fail
1	0.998	0.002	Pass
5	5.003	-0.003	Pass

**Stage 6: Reset the SOS**

#830;1500

**Stage 7: Reset maximum range to 105m**

#823;105 (500kHz units)

**Stage 8: Reset spurious range**

#226;0

Calibrated by:	J.Harper	Date:	28/01/2016
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Instrument type	Altimeter
Serial number	53821
Rate set ex factory	115200

Calibration History:	Certificate	Date
	43900	28/01/2016

System Components	Original Manufacture			Modification			Modification			Modification		
	Part (Blank=Not Filled)	Iss	Serial Number	Range / Firmware	Part (Blank=Not Filled)	Iss	Serial Number	Range / Firmware	Part (Blank=Not Filled)	Iss	Serial Number	Range / Firmware
board	0430502	C	110929									
board	0430501	C	78627	ACTEL 0430707 ATMEL 0430704A13								
ducer Assembly	500kHz Neptune		31059	100m								
ure sensor	PAA - 10LX		N/A	N/A								
				Name			Name			Name		
				Date			Date			Date		
				Signed			Signed			Signed		
				P Tremlett			P Tremlett			P Tremlett		
				28/01/2016			28/01/2016			28/01/2016		
												