

Sea Bird Altimeter Setup, Test & Check Instructions

Document: 0430840
Revision: A
Issued: 11/12/2013

Page #: 1 of 6



This document was prepared by the staff of Valeport Ltd., the Company, and is the property of the Company, which also owns the copyright therein. All rights conferred by the law of copyright and by virtue of international copyright conventions are reserved to the Company. This document must not be copied, reprinted or reproduced in any material form, either wholly or in part, and the contents of this document, and any method or technique available therefrom, must not be disclosed to any other person whatsoever without the prior written consent of the Company.

Valeport Limited,
St Peter's Quay,
Totnes,
Devon, TQ9 5EW
U.K.

Tel: +44 (0)1803 869292
Fax: +44 (0)1803 869293
e-mail: sales@valeport.co.uk
Web: www.valeport.co.uk

1 AUTHORISATION

	Position	Name	Date
Prepared by	Mechanical Design	Sven Hirons	11/12/2013
Checked by			
Approved by			


2 AMENDMENT RECORD

Issue	Date	Details of Amendments
A	11/12/2013	First Draft Issued


3 FEEDBACK & MAINTENANCE

Responsibility for continually verifying that this document is accurate and up to date lies with the individual using the document. Any individual knowingly using an out of date document, or who fails to report a required amendment to the document, will be held responsible for any consequences of their inaction.

Any comments resulting from the use of this document, or any required changes to the contents, descriptions and references, should be made in writing to the originator of the document, preferably with a copy of the document marked to indicate the required changes.

Sea Bird Altimeter Setup, Test & Check Instructions	Document: 0430840 Revision: A Issued: 11/12/2013	Page #: 2 of 6	
--	---	-----------------------	---

Contents	Page
1 AUTHORISATION.....	1
2 AMENDMENT RECORD	1
3 FEEDBACK & MAINTENANCE	1
4 INTRODUCTION.....	3
5 ASSEMBLY & CALIBRATION PROCEDURE	3
5.1 Relevant Reference Documents.....	3
5.2 Instrument Manufacture	3
5.3 PCB Testing	3
5.4 Calibration	3
5.5 Documentation	3
6 INSTRUMENT DETAIL	5
7 SEA BIRD SPECIFIC SETUP COMMANDS	5
8 FINAL CHECKS	6
9 SIGNATURE	6

Sea Bird Altimeter Setup, Test & Check Instructions	Document: 0430840 Revision: A Issued: 11/12/2013	Page #: 3 of 6	
--	---	-----------------------	---

4 INTRODUCTION

This document has been written to ensure that the housed VA500 Altimeter supplied to Sea Bird as part number 0430003-SBE is manufactured, setup, tested and checked according to the specific requirements of the customer, Sea Bird.

It also applies in part to any housed versions of the VA500 Altimeter product range supplied to this customer.

Sections 6, 7, 8 & 9 of this document should be printed for each sensor despatched (including sensors returned for service/repair/calibration) and fully completed and signed by the individuals responsible for each procedure.

No sensor is to be despatched without this document being completed.

Once complete, this document should be copied – the original is to be despatched with the sensor and the copy filed with Valeport's copy of the calibration documents, as per existing procedure.

5 ASSEMBLY & CALIBRATION PROCEDURE

5.1 Relevant Reference Documents

0430818	PCB Test procedure for 0430501 Micro Board
0430819	PCB Test procedure for 0430502 PSU Board
0430841	Sea Bird VA500 Altimeter parts list
0430839	Standard VA500 Altimeter transducer manufacturing instructions
0430835	Standard VA500 Altimeter manufacturing instructions
0430824	VA500 Altimeter # codes
0430830	VA500 Altimeter test procedure
0430828	Calibration sheet

5.2 Instrument Manufacture

- 1) Standard manufacturing procedure, replacing 0430C06, 0430142 & 0150244 with 0430C19, 0430157 & 0150238 respectively to account for Impulse connector
- 2) This instrument will be supplied without comms leads or transit case. For testing and calibration purposes use test lead 0430C20

5.3 PCB Testing

Complete the PCB testing according to the standard procedure described in documents 0430818 & 0430819.

5.4 Calibration

Perform calibration procedure as described in document 0430828

5.5 Documentation

Print two copies of the Sensor Build Record, Sensor Calibration Sheet, and Summary Certificate. Sign and date as required, and put one copy of each in the back of the operating manual supplied with the sensor.

Put the other copy in the sensor archive file as per standard procedure.

Print and Complete Sections 6 – 9 of this document. Take a copy, send the original with the sensor, and place the copy on file with the calibration documents above.


**Sea Bird Altimeter
Setup, Test & Check
Instructions**

Document: 0430840
Revision: A
Issued: 11/12/2013

Page #: 4 of 6



This page intentionally blank

Sea Bird Altimeter Setup, Test & Check Instructions	Document: 0430840 Revision: A Issued: 11/12/2013	Page #: 5 of 6	
--	---	-----------------------	---


Sections 6 to 9 to be printed and despatched with each sensor (copy retained on file)

6 **INSTRUMENT DETAIL**

Serial Number	Contract Number	Calibration Number
76740	30789	66415

7 **SEA BIRD SPECIFIC SETUP COMMANDS**

Command	Description	Initial When Done
#059;9600<cr><lf>	Sets baud rate to 9600	KB
#034<cr><lf>	Should return correct instrument serial number	KB
#082;BENTHOS<cr><lf>	Sets Benthos data output string	KB
#094;0<cr><lf>	Sets 0 – 5V analogue output	KB
#095<cr><lf>	Reads the analogue output setup	KB
#089<cr><lf>	Reads current output format	KB
#032<cr><lf>	Should return (0430704A16) as the firmware version	KB
M4<cr><lf>	Sets continuous sampling at 4Hz	KB
#083;0<cr><lf>	Turns off pressure output	KB
#824<cr><lf>	Reads maximum set range	KB
#0841<cr><lf>	Reads minimum set range	KB

Sea Bird Altimeter Setup, Test & Check Instructions	Document: 0430840	Page #: 6 of 6	
	Revision: A		
	Issued: 11/12/2013		

8 FINAL CHECKS

Description	Initial When Done
Verify that Calibration and warranty documents are provided	<div>KB</div>
Verify that running supply current is between 100 and 140mA at 12V (.135mA.)	<div>KB</div>
Pressure test to 100bar for 30 minutes	<div>KB</div>
Check that resistance between 0V supply (Pin 6) and body is >1MΩ	<div>KB</div>
Ensure main serial number is engraved on the Altimeter housing	<div>KB</div>
Check that the sensor is adequately packed in its transit case before being boxed	<div>KB</div>

9 SIGNATURE

I verify that the instrument referred to in this document has been assembled, tested and checked according to the procedure defined herein, and is ready for shipment to the customer

Signature:..... *K.A Bovey*

Print Name:.....**KELLI BOVEY**.....

Date:.....**06/04/2021**