

## Sutron Accubar Barometer Field Calibration



The following step by step procedure details how to manually enter and calibrate a C2 coefficient for a Sutron Accubar barometer, coupled with a Sutron Xpert data logger:

XTerm Com	munications	X		
Com Port:	Baud Rate: 115200 💌	Hardware © Direct © Modem		
To:	×	C TCPIP		
From:	PC	○ TELNET		
User Name:		🔲 640x480		
Password:		Telnet Port:		
Phone #:	ļ	23		
Sample Command Line:				
XTerm COM1:115200				
[	OK Exit			

1. After double-clicking on the Xterm.exe icon on the computer's desktop, the user's setup screen should be as shown: keep the settings at default, with Com 1: 115200 (bps): direct. Click OK.



2. At the login prompt, issue the appropriate user name and password. Click OK.



3. After a successful login, the access screen should be visible. Click on Setup Access to continue.



X•• XTerm COM1:115200	
Main     Setup     Sensors     Data     Log     Status       Station     Info     Station     Status       Date/Time:      Recording:       02/01/2008     16:03:17     ON+TX     Stop       Station name:      Alarm:       87654321     NORMAL     Clear	C Rx C Tx C Xp C Err File Transfer Set Clock Connect
Contrast 22  Logout	Upgrade Status Web Server Auto Update

4. Once the main window is visible, click on the tab marked Sensors (the third marking from the left).

## To Manually Enter a Leveled C2 Coefficient:





X XTerm COM1:115200				
Main	Setup Sensors Data Log Status	ORX OTX		
N	SDI Properties 🛛 🔺	File Transfer		
P∿	Address: 5 🔽 OK	Set Clock		
B4	Command: M Cancel 📕			
Rŀ	Slope: 1	Connect		
RH W	Offset: 22.4	Upgrade		
I	Units:	Status		
ГM	leas Meas All Cal Prop SDI	Veb Server		
		🔽 Auto Update		

5. Identify the listing marked as "Baro." After highlighting the name with the cursor, click on the Properties button located on the bottom of the screen.

6. A pop up window will state that the DCP recording will stop in order to carry on. Click the Yes button to continue.

 The SDI Properties window for the Accubar barometer will be displayed. On the offset field, insert the barometer C2 coefficient then select the OK button (Note: the Sutron Accubar barometer contains an internal raw coefficient value of zero; see NOAA's "Barometer Calibration Guidelines", updated February 2002 for new and existing barometer installations).



## To Calibrate with a Portable Handheld Barometer



 In order to numerically tie an Accubar barometer with a field barometer (typically a GE Druck DPI 740), highlight the sensor marking tagged "Baro" under the sensor tab. Then click on the Calibrate button on the bottom middle of the screen.

X•• XTerm COM1:115200					
Main Set	OBx OTx				
Name	Enter current value	File Transfer			
PWIND	1023.55 OK 968 D. 1000 .	Set Clock			
BARO	7 8 9 Cancel 1000.				
RHAT	4 5 6 Clear ; Q	Lonnect			
Water	1 2 3 Bkspc ; Q = €	Upgrade			
	0 +/	Status			
Meas	Meas All Cal Prop SDI	✓ Web Server ✓ Auto Update			





9. A window will then pop up, allowing the user to enter the barometric pressure reading of the portable device. This allows the Accubar to be matched with the user's handheld barometer. Enter the value then press the OK button.

10. The Xpert will ask if the user would like the sensor to be measured in order to update its reading; select Yes to continue.

11. To attain the updated C2 coefficient after a field calibration, highlight "Baro" once again and select the Properties button. The offset field will display the new value. Click OK to return to the sensors tab.





12. Eventually the user will want to verify that the data logger resumes recording. If a pop up window asks to restart recording, click Yes.



13. Return to the main tab; be sure that the recording field states "ON+TX." Once the user is finished, click Logout on the bottom of the screen.