

**SBE***www.seabird.com***Sea-Bird Electronics, Inc. FAX: (425) 643-9954**

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Website: <http://www.seabird.com>Email: [seabird@seabird.com](mailto:seabird@seabird.com)**DISSOLVED OXYGEN SENSOR CALIBRATION: S/N 130433 11 March 2000**

Sensor type:

YSI

Sensor Current

m = 1.0048 E-5

b = -4.8229 E-9

The use of these constants in a linear equation of the form

$$I = mV + b$$

will yield DO sensor membrane current as a function of sensor output voltage.

Sensor Compensation Temperature

k = 6.5742

c = -1.4886

The use of these constants in a linear equation of the form

$$T = kV + c$$

will yield membrane temperature as a function of temperature channel voltage with a maximum error of about 0.5 deg C. The correction to dissolved oxygen resulting from the use of this calibration should be sufficient to achieve the precision of which the sensor is capable.

SEASOFT Coefficients based on Oxfit Calibration Results

Soc	0.0727	
Boc	-0.0048	
teor	-0.033	(nominal)
peor	1.50e-4	(nominal)
tau	2.0	(for profiling applications only)
tau	0.0	(for moored applications only)
wt	0.67	(for Beckman type sensors)
wt	0.85	(for YSI type sensors)

barometer	=	1022.302	mB
Twater	=	5.891	deg C
Tcomp	=	5.966	deg C
Isat	=	16.916	uA
Iair	=	24.924	uA
Izero	=	0.065	uA

**CALIBRATION  
AFTER  
MODIFICATIONS**