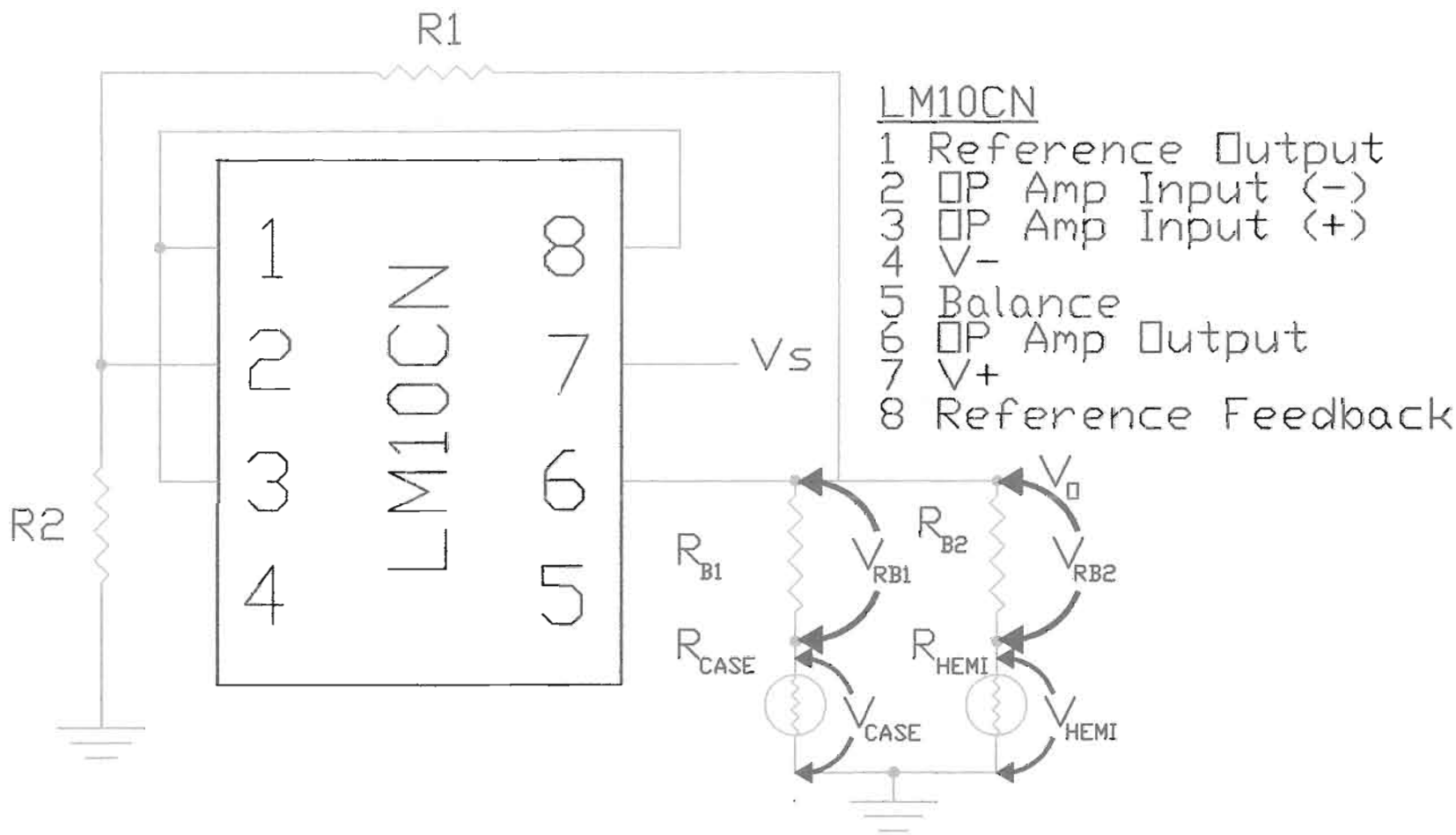

NA

NOTES

1. R1=165k ohms 0.1% 15PPM RC55Y
2. R2=10k ohms 0.1% 15PPM RC55Y
3. RB1=10,009.7 ohms 0.1% 15PPM RC55Y BD A
4. RB2=10,001.7 ohms 0.1% 15PPM RC55Y BD A
5. RB1=10,006.4 ohms 0.1% 15PPM RC55Y BD B
6. RB2=10,009.8 ohms 0.1% 15PPM RC55Y BD B

TOLERANCES: NA	DATE: 11/12/03	OREGON STATE UNIVERSITY–OCEANOGRAPHY MARINE TECHNICIANS			
	DESIGNER: FAYLER	TITLE: PIR THERMISTOR CIRCUIT DIAGRAM			
MATERIAL: NA	FILE NAME: SEE TITLE	pir_therm_circuit_v3.dwg			
FINISH: NA	SCALE: NA	DRAWING NO.: NA	SHEET: 1 OF 1	REV.: 0	DATE: 11 DEC 03

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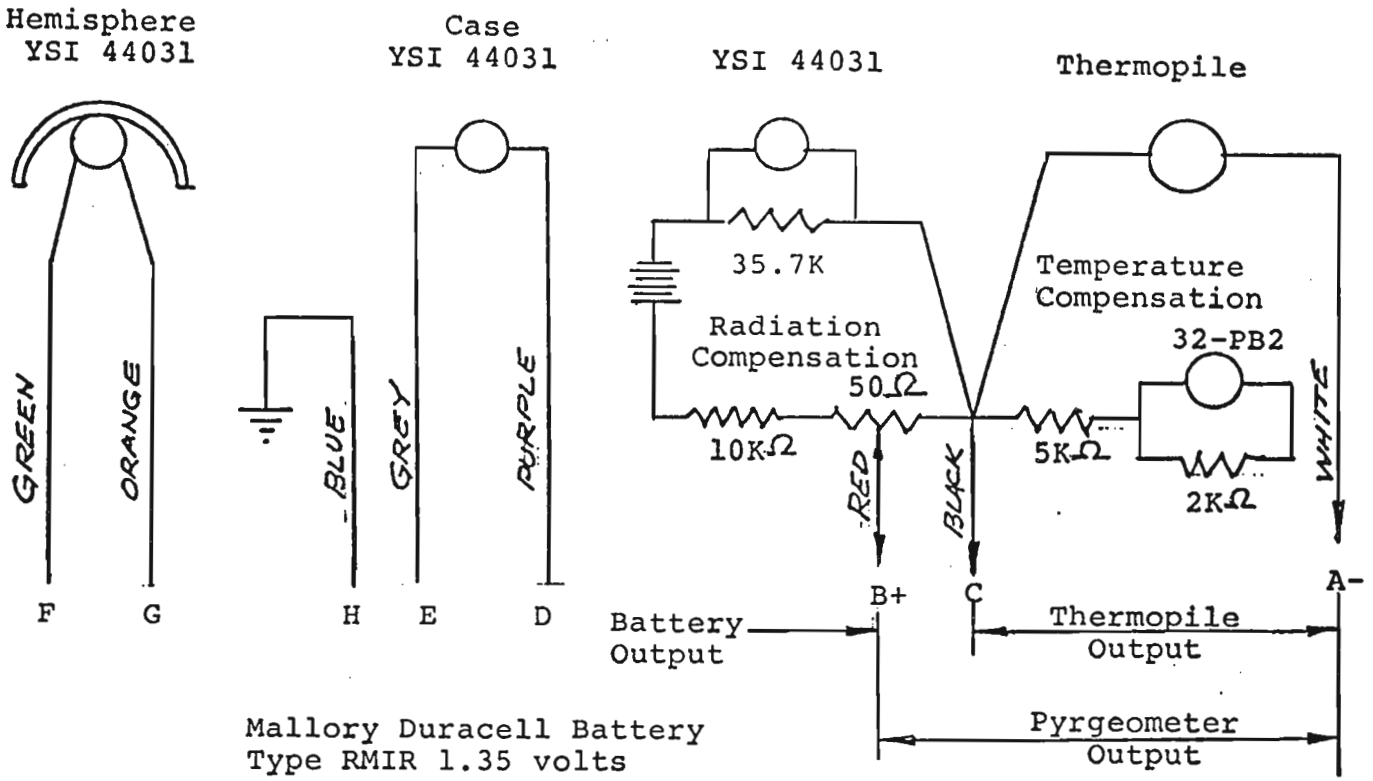
Wiring List for PIR - PSP Amplifier Box

	Terminal	
AMP 65096 +INPUT (1)	1	PSP +Signal Pin B Instrument (B) #(red)
AMP 65096 -INPUT (2)	2	PSP -Signal Pin A Instrument (A) #(blk)
AMP 65096 GUARD (9)	3	SHIELD (C) #
AMP 65096 +OUTPUT (4)	4	MODULE 'g' +/-1V +IN
AMP 65096 -OUTPUT (11)	5	MODULE 'g' +/-1V -IN
AMP 65097 +INPUT (1)	6	PIR +Signal IN (B) *(blk-pr1)
AMP 65097 -INPUT (2)	7	PIR -Signal IN (A) *(wh-pr1)
AMP 65097 GUARD (9)	8	SHIELD (H) *(pr1)
AMP 65097 +OUTPUT (4)	9	MODULE 'f' +/-100mV +IN
AMP 65097 -OUTPUT (11)	10	MODULE 'f' +/-100mV -IN
BRIDGE CIRCUIT 1A +IN	11	CASE THERMISTOR (D) *(grn-pr2)
BRIDGE CIRCUIT 1A -IN	12	CASE THERMISTOR (E) *(blk-pr2)
BRIDGE CIRCUIT 1B +IN	13	HEMISPHERE THERMISTOR (G) *(red-pr3)
BRIDGE CIRCUIT 1B -IN	14	HEMISPHERE THERMISTOR (H) *(blk-pr3) F
BRIDGE CIRCUIT 1A +OUT	15	MODULE 'B' +IN
BRIDGE CIRCUIT 1A -OUT	16	MODULE 'B' -IN
BRIDGE CIRCUIT 1B +OUT	17	MODULE 'C' +IN
BRIDGE CIRCUIT 1B -OUT	18	MODULE 'C' -IN
BRIDGE CIRCUIT 1A, BRIDGE CIRCUIT 1B	19	+12 Vdc @(grn-pr1)
BRIDGE CIRCUIT 1A, BRIDGE CIRCUIT 1B	20	+12 Vdc Power Ground @(blk-pr1)
AMP 65096 (8), AMP 65097 (8)	21	+24 Vdc @(red-pr2)
MODULE 'B', MODULE 'C'	22	MODULE 'g', MODULE 'f'
AMP 65096 (15), AMP 65097 (15)	23	+24 Vdc Power Ground @(blk-pr2)
MODULE 'B', MODULE 'C'	24	MODULE 'g', MODULE 'f'
AMP 65096 (13), AMP 65097 (13)	25	SHIP GROUND, RS-485 @ SH (pr1 & pr2)
+RS485 @(wh-pr3)	26	MODULE 'g', MODULE 'f'
	27	MODULE 'B', MODULE 'C'
-RS485 @(blk-pr3)	28	MODULE 'g', MODULE 'f'
	29	MODULE 'B', MODULE 'C'
	30	

Cable From PSP - Bendix Connector 9123 PTO6W-8-4S: A)-Signal B)+Signal C) Shield

*Cable From PIR - Bendix Connector 9146 PTO6W-12-10S: A)-Signal B)+Signal C)NC D)Case Therm E)Case Therm F)Hemi Therm G)Hemi Therm H)Shield J)NC K)NC

@Cable to Dog House Box - Conxal 3282-8PG-3XX: 1)+12Vdc 2)+24Vdc 3)Common (24Vdc) 4)Ship Ground '5)+RS485 6)-RS485 7)Common(12Vdc) 8)Shield



A through H are pin designations on both portions of the connector.

To check calibration of compensation circuit, measure across pins E & D to obtain the temperature of the instruments, express it in absolute terms (T_1). Measure millivolt output across pins B & C (mv). S equals sensitivity of instrument expressed in mv/cal, cm^{-2} min. Stefan-Boltzmann Constant = 8.124×10^{-11} cal cm^{-2} deg^{-4} min^{-1}. Then $T_1^4 \ (8.124 \times 10^{-11}) = \frac{mv}{s}$. The millivolt output can be adjusted with the small pot inside the instrument (take bottom off, the battery life, in this operation, is believed to be at least one year).

$T_1 = °C + 273.15 = °K$