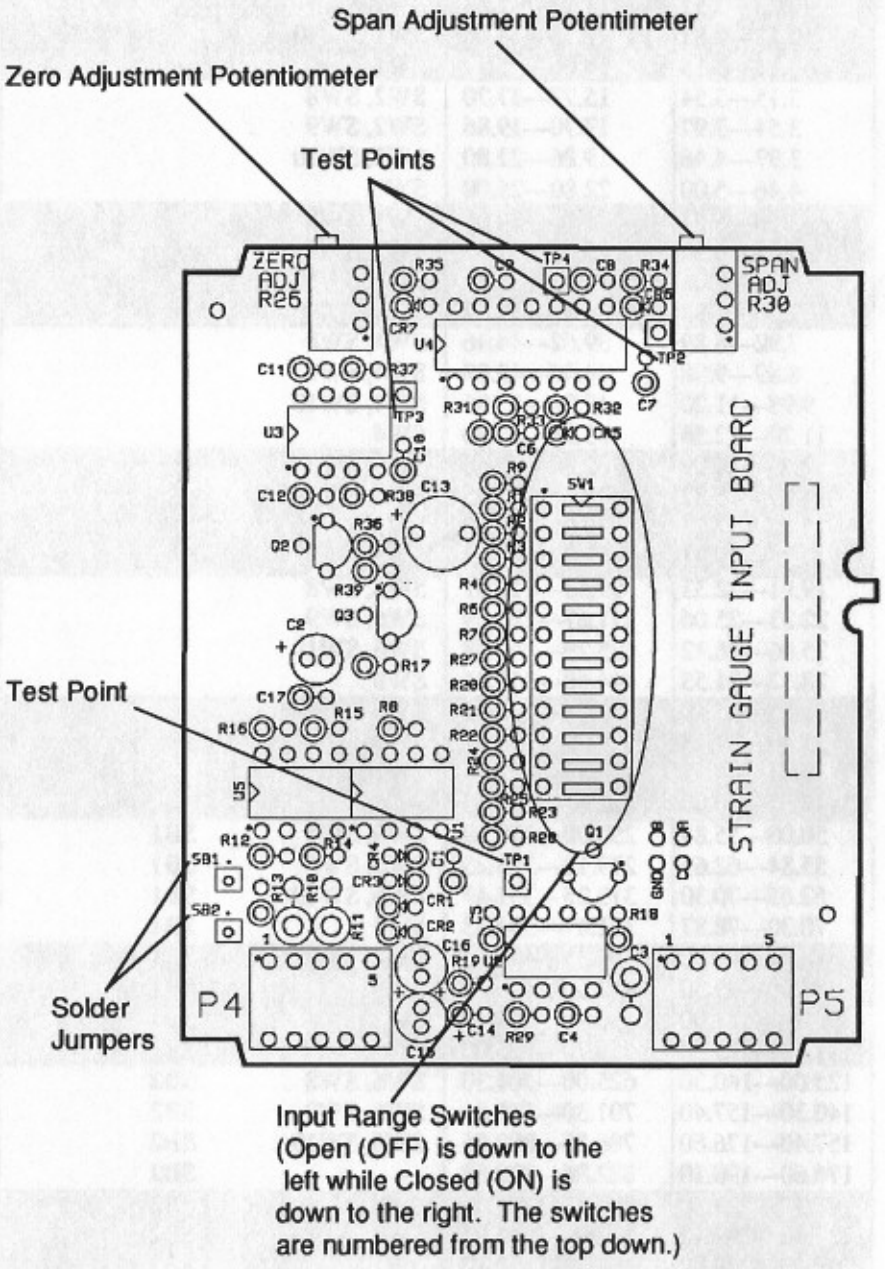
Strain Gage Input Board Part Locations



Specifications

Input Ranges:	2.0mV/V to 300mV/V
Input Impedance:	>1MΩ
Stability:	0.01%/°C
Response Time:	100ms
Excitation:	5V (pulsed 80mA)
Excitation Stability:	0.003% Span/°C
Linearity	0.025%

For general Series 8000 specifications, see the Series 8000 manual, which provides general information for the entire series.

Setup Procedure

I. Disassemble the Series 8000 unit as described on page 6 of the main manual.
II. Remove the Strain Gage Input Board.
III. Determine the appropriate switches, solder jumpers and offset switch settings for your input in the table below.
IV. Calibrate the Strain Gage Input Board, as shown on page 09-2.
V. Reassemble the unit as described in the main manual, pages 4 to 6.

Setup Instructions

Excitation

Zero-based Inputs/Bi-polar Inputs

Refer to the Standard Inputs Table, page 09-2. If the input you need is not on that table, refer to the Non-Standard Inputs Table, page 09-3. Set the indicated switches and solder jumper .

Offset Inputs (Tare)

If you are using zero offset, select the appropriate switches and solder jumper settings on the Non-standard Inputs Table. Switch SW11 provides a 25% positive offset of input span, switch SW12 provides a 25% negative offset, and the zero potentiometer supplies a ±25% offset.

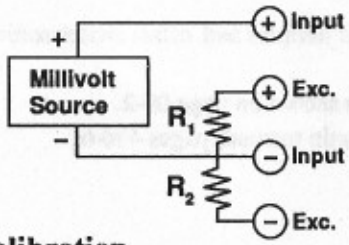
2800-4011-01

Standard Inputs Table

mV/V	Switches (closed or ON)
2	SW1, SW8
3	SW1
4	SW2, SW10
5	SW3, SW8
10	SW4, SW10
12	SW4
15	SW5, SW9
20	SW6, SW8
±1	SW1, SW8, SW12
±2	SW2, SW10, SW12
±5	SW4, SW10, SW12
±10	SW6, SW8, SW12
±20	SW10, SW12

Calibration Setup

Using a millivolt source and two resistors of equal value (±10%), connect the input board as shown below. Refer to input connection label for proper pin hookup.



$R_1 = R_2$ (any value from 100Ω to 1kΩ)

Calibration

1. Set your input to its minimum value.
2. Adjust the input zero potentiometer until the zero LED located on the output board lights (the Limit Alarm Board does not have an LED, refer to the manual for that board).
3. Adjust the zero potentiometer on the output board.
4. Set your input to maximum full scale.
5. Adjust the span potentiometer for maximum output.
6. If you cannot adjust the span low enough in step 4, then set switch 7 to ON, and re-adjust the span potentiometer.

Non-standard Inputs Table

Input (mV/V)	Full Scale (mV)	Switches (ON)	Solder Jumper (closed)
2.00—2.23	10.00—11.17	SW1, SW8	
2.23—2.51	11.17—12.53	SW1, SW9	
2.51—2.81	12.53—14.06	SW1, SW10	
2.81—3.15	14.06—15.77	SW1	
3.15—3.54	15.77—17.70	SW2, SW8	
3.54—3.97	17.70—19.86	SW2, SW9	
3.97—4.46	19.86—22.80	SW2, SW10	
4.46—5.00	22.80—25.00	SW2	
5.00—5.61	25.00—28.05	SW3, SW8	
5.61—6.30	28.05—31.47	SW3, SW9	
6.30—7.06	31.47—35.31	SW3, SW10	
7.06—7.92	35.31—39.62	SW3	
7.92—8.89	39.62—44.46	SW4, SW8	
8.89—9.98	44.46—49.88	SW4, SW9	
9.98—11.20	49.88—55.96	SW4, SW10	
11.20—12.56	55.96—62.80	SW4	
12.56—14.09	62,80—70.46	SW5, SW8	
14.09—15.82	70.46—79.05	SW5, SW9	
15.82—17.75	79.05—88.70	SW5, SW10	
17.75—19.91	88.70—99.53	SW5	
19.91—22.33	99.53—111.67	SW6, SW8	
22.33—25.06	111.67—125.29	SW6, SW9	
25.06—28.12	125.29—144.58	SW6, SW10	
28.12—31.55	144.58—157.74	SW6	
31.55—35.40	157.74—176.99	SW8	
35.40—39.73	176.99—198.57	SW9	
39.73—44.57	198.57—222.84	SW10	
44.57—50.00	222.84—250.00	—	
50.00—55.84	250.00—279.18	SW6, SW8	SB1
55.84—62.65	279.18—313.25	SW6, SW9	SB1
62.65—70.30	313.25—351.47	SW6, SW10	SB1
70.30—78.87	351.47—394.35	SW6	SB1
78.87—88.50	394.35—442.50	SW8	SB1
88.50—99.30	442.50—496.46	SW9	SB1
99.30—111.00	496.46—555.70	SW10	SB1
111.00—125.00	555.70—625.00	—	SB1
125.00—140.30	625.00—701.30	SW6, SW8	SB2
140.30—157.40	701.30—786.85	SW6, SW9	SB2
157.40—176.60	786.85—882.86	SW6, SW10	SB2
176.60—198.10	882.86—990.58	—	SB2
198.10—221.30	990.58—1111.00	SW8	SB2
221.30—249.40	1111.00—1246.97	SW9	SB2
249.40—279.80	1246.97—1399.12	SW10	SB2
279.80—314.00	1399.12—1559.85	—	SB2