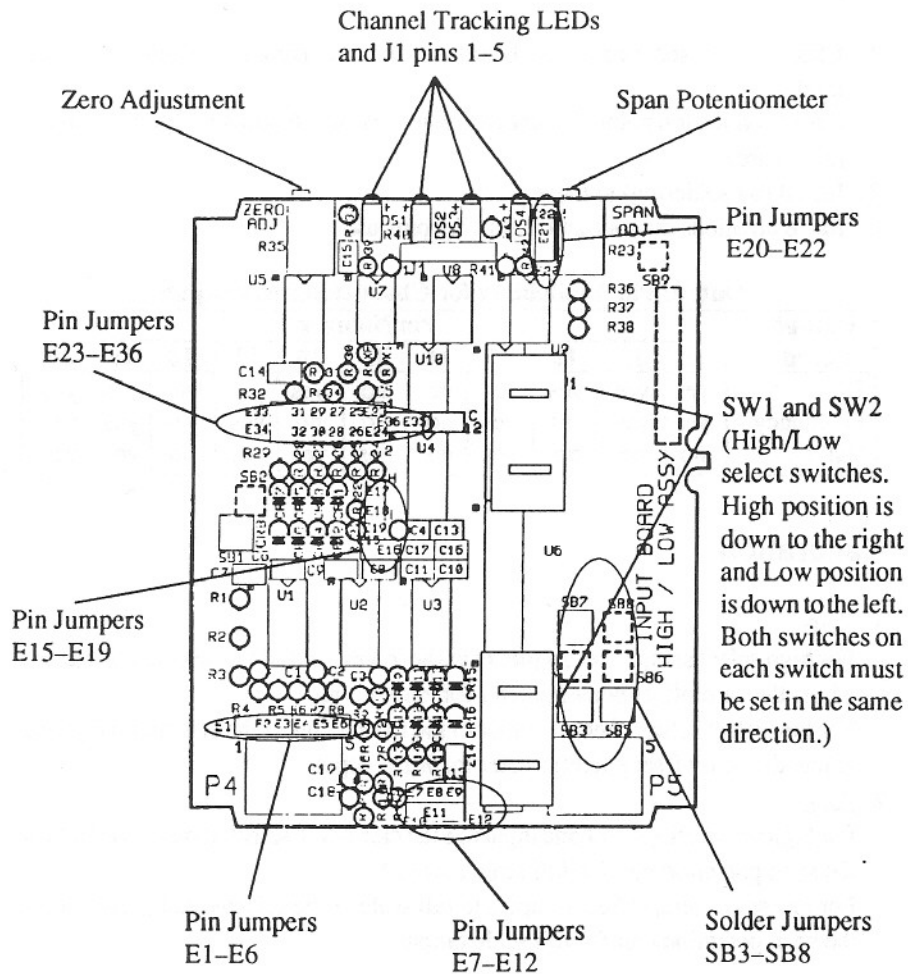


## High/Low Select Input Board Part Locations



## Series 8000

## High/Low Select Input

This board provides an output proportional to either the highest or lowest input of the selected number of inputs. From 2 to 4 inputs can be selected.

### Specifications

**Inputs:** DCV or Current

**Ranges:** Voltage: 0.1V, 1V, 5V, 10V, and special range provision

Current: 0-1mA, 0-20mA, 4-20mA, 10-50mA

(current shut 500mV max)

**Overvoltage Protection:** 250VAC

**Current Max:** 150mA (10Ω), 50mA (100Ω)

**Response Time:** 100ms

**Accuracy:** 0.25% of span

**Stability:** 0.02% of Span/°C

**Input Z:** >1M ohm

**Status indicators:** one per channel (LED), status output opto 5V TTL

*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 High/Low Select Input Board.
- III. Select the needed configuration, and follow the setup instructions below.
- IV. Calibrate the unit as described on page 12-3.
- V. Reassemble the unit as described in the main manual, pages 4 to 6.

### Setup Instructions

#### Number of Inputs

Determine number of inputs required and disable unnecessary inputs. Four inputs are possible. Both Input C and Input D can be disabled. To disable Input 3, remove the pin jumper from either E7-E8 or E8-E9 and place over E13-E14. To disable Input 4, remove pin jumper from either E10-E11 or E11-E12 and place over E15-E16.

#### High or Low Selection

Set the selection for high or low. If you choose high, the channel with the highest voltage or current will be tracked to output; if you choose low, the lowest voltage

or current will be tracked to output. To select high or low, set the SW1 and SW2 switches and the E17-E19 and E20-E22 jumper pins as described below.

Switch	High	Low
SW1	Hi	Lo
SW2	Hi	Lo

High	Low
E17-E18	E18-E19
E21-E22	E20-E21

High selection is the standard setting.

### Range Selection

Set the range jumper pins to the desired range by using the following table:

Range	Input A	Input B	Input C	Input D	Gain
0-0.1V	E1-E2	E4-E5	E7-E8	E10-E11	E33-E34
0-1V	E1-E2	E4-E5	E7-E8	E10-E11	E23-E24
0-5V	E2-E3	E5-E6	E8-E9	E11-E12	E25-E26
0-10V	E2-E3	E5-E6	E8-E9	E11-E12	E23-E24
0-1mA	SB1,E1-E2	SB3,E4-E5	SB5,E7-E8	SB7,E10-E11	E33-E34
0-20mA	SB2,E1-E2	SB4,E4-E5	SB6,E7-E8	SB8,E10-E11	E29-E30
4-20mA	SB2,E1-E2	SB4,E4-E5	SB6,E7-E8	SB8,E10-E11	E31-E32
10-50mA	SB2,E1-E2	SB4,E4-E5	SB6,E7,E8	SB8,E10-E11	E27-E28

Voltage and current signals can be input at the same time, but offsets must be the same (i.e. 1-5V and 4-20mA have the same percentage offset).

### Status Output Options

The channel that is being tracked is indicated on an LED. Isolated outputs (5V TTL) can be provided through the following J1 pins (located below the LED indicator):

Channel	J1 Pin
1	1
2	2
3	3
4	4
Common	5

Any unused output pins on the Base Unit can be wired for output with the connector wires included with this board. The pins that are available vary depending on the particular output board that you are using. To set up for output, follow the steps below:

1. Check for unused pins on the board that you are using (see diagram for your model).
2. Select connection points for status output lines (see diagram for 20-pin distribution board).
3. Install (by soldering) to these points.
4. Make notations on your label showing pins used.

### Output Pin Availability for Channel Status Outputs

Output Board	Pin Number										
	10	11	12	13	14	15	16	17	18	19	20
DC	yes	yes	yes	yes	no	no	yes	yes	yes	yes	yes
Frequency	yes	yes	yes	yes	no	no	no	yes	yes	yes	yes
Valve	no	no	no	yes	no	yes	yes	yes	no	yes	yes

### Calibration

#### 1. Zero

For high select setups: Set all inputs to the lowest end of the selected range and adjust the zero offset potentiometer for zero output.

For low select setups: Set one input to the lowest end of the selected range and adjust the zero offset potentiometer for zero output.

#### 2. Span

For high select setups: Set one input to full scale of the selected range, and adjust the span potentiometer for full scale output.\*

For low select setups: Set all inputs to full scale of the selected range and adjust the span potentiometer for full scale output.\*

\* (If the span potentiometer will not adjust to full scale, open SB9 and repeat steps 2 through 4.)