

IAC200 Quick Start Guide



FUTEK
ADVANCED SENSOR TECHNOLOGY, INC.

1-800-23-FUTEK

10 Thomas, Irvine, CA 92618, USA

Tel: (949)465-0900

Fax: (949)465-0905

futek@futek.com

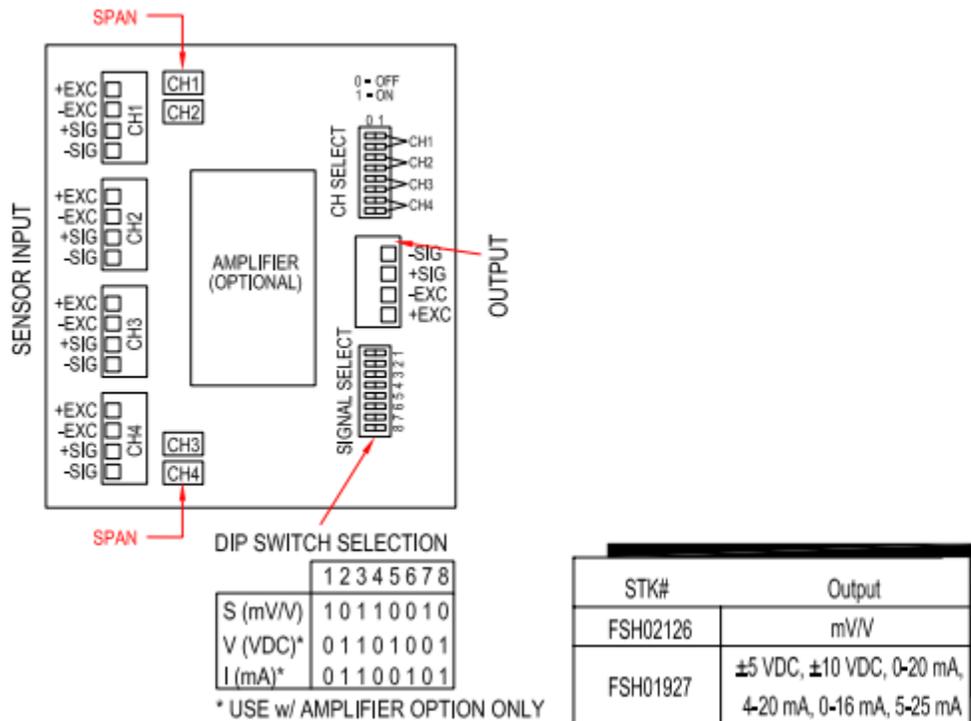
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The Function of the IAC200

The IAC200 is a summing junction box. A summing junction box is an instrument that has the ability to combine multiple inputs and convert it into one output.



Setting up an Un-Amplified IAC200 (FSH02126)

1. Connect all of the load cells to the input channels and connect the output to your instrument.
2. Activate one of the channels using the Channel Select DIP switches.
3. Take the average of the sensitivities (mV/V) of all the connected load cells.
 - a. The sensitivity can be found on the sensor's calibration certificate.
4. Apply a known load to the active load cell and adjust the span to an appropriate level according to the average sensitivity (mV/V) of all the connected sensors.
5. Repeat steps 2 and 4 to adjust the span of the other sensors, one by one, by applying the **same** load which was used for adjusting the span of the first sensor, until all of the spans have been adjusted.
6. Use the Channel Select DIP switches on the IAC200 to turn on all of the channels that are being used.
7. Apply a load evenly across all of the load cells connected, and confirm the setup.

Setting up an Amplified IAC200 (FSH01927)

1. Set the DIP switches on the IAC200 to select the desired type of output signal. See the DIP switch selections on the diagram on page 3.
2. Adjust the excitation on the internal amplifier of the IAC200. See each sensor's spec sheet for specifications on excitation voltage.
 - a. This is adjusted as it would be for the CSG110. (see "Excitation" on page 6 of the CSG110 Product Manual)
3. Find the lowest sensitivity (mV/V) out of all the sensors.
 - a. The sensitivity can be found on the sensor's calibration certificate.
4. Adjust the gain on the internal amplifier that would correlate with the lowest sensitivity found.
 - a. This is adjusted as it would be for the CSG110. (see "Gain" on page 6 of the CSG110 Product Manual)
 - b. The CSG110 Gain Settings excel spread sheet can also be used to determine the correct DIP switch settings for the lowest sensitivity. (The Gain Settings spread sheet can be downloaded from the CSG110 support section)
5. Connect all of the load cells to the input channels and connect the output to your instrument.
6. Use the Channel Select DIP switches to select only the sensor with the lowest sensitivity.
7. Place a load on the selected channel and make note of the output.
8. Select one channel at a, place a load on the selected channel, and use the span potentiometers on board the IAC200 to fine tune each sensor's output to as close to the output of the sensor with the lowest sensitivity.
9. Use the Channel Select DIP switches on the IAC200 to turn on all of the channels that are being used.
10. Adjust the zero potentiometer on the internal amplifier to as close to 0 V as possible. (see CSG110 spec sheet for location of zero potentiometer)
11. Use one of the two options listed below to adjust the internal amplifier's span. The first option will produce the most accurate results. (see CSG110 spec sheet for location of span potentiometer)
 - a. Option 1
 - i. Turn on all of the channels being used and place a load evenly across all of the load cells.
 - ii. Adjust the span on the internal amplifier until the output matches the level of load placed individually on each sensor. This is adjusted as it would be for the CSG110.

- b. Option 2
 - i. Turn on one of the channels and place a load on the corresponding load cell.
 - ii. Adjust the span on the internal amplifier until the output matches the level of the load placed on the load cell. This is adjusted as it would be for the CSG110.

Note: If current output is desired, and the previous output voltage range was 0-5 V, then the current setting switches will need to be changed on the internal amplifier to DOWN, UP, DOWN on SW5, SW6, and SW7, respectively (see Current Setting on page 7 of the CSG110 product manual for more settings). This will achieve a 4-20 mA output. The Signal Select DIP switches on the IAC200 will also have to be changed to output a current signal.