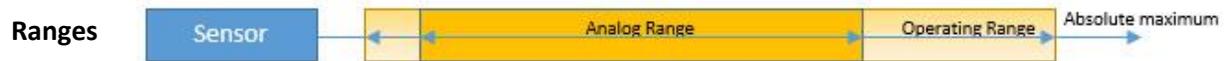


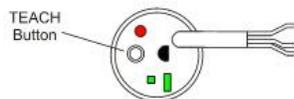


Setting ANALOG MIN AND MAX by TEACH button on SENIX sensors

Most Senix sensors come ready for digital communication using Modbus over serial data connections. Some Senix models also have a pushbutton that can be used to set parameters such as the analog output range. Senix invented the pushbutton method of setup in 1990, universally adopted since then by major sensor makers worldwide. We retain that capability because sometimes an in-situ calibration is the best choice, as in applications where a computer is not possible or available.



Analog range shouldn't be confused with the operating range. The analog range or window is a *region within* the overall operating range. Ultrasonic echoes from outside the operating range are ignored. And the analog range within the operating range is the region where the output voltage or output current varies according to measured distance. Consider instantaneous voltage or current output as position data. In a Senix sensor with a pushbutton the analog range can be set using the TEACH mode.



Teaching either analog endpoint by TEACH button requires a valid target at the required distance. The analog high can be either the nearer or farther point. A simple procedure to set the analog window by pushbutton follows.

To Enter or Exit TEACH MODE

1. Press and HOLD the pushbutton while you count THREE BLINKS of the round LED.
2. Release the pushbutton. The round LED will continue to flash on and off slowly, indicating the sensor is in TEACH MODE.

Set the ANALOG LOW (4ma or 0v) distance

1. Set the sensor so a valid target is at the distance you want for the LOW output and the sensor status LED is green.
2. To set the ANALOG LOW output at the current distance, hold the pushbutton and count 4 blinks of the ROUND LED and release

To set the ANALOG HIGH (20 mA or 10V) distance

1. Set the sensor so a valid target is at the distance you want for the HIGH output and the sensor status LED is green.
2. To set the ANALOG HIGH output at the current distance, hold the pushbutton and count 5 blinks of the ROUND LED and release

The sensor will output a voltage or current proportional with the measured distance between these points.

To exit TEACH mode, hold the pushbutton for 3 blinks and release.