**SW0147 Calibration Software for the Models 510 & 520**

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# Starting the Software

1. Connect up to the 5xx, via either flying leads or through the electrical connector on the top of the adapter.
2. Connect **TL1195** via the cable to the USB port on the computer to be used for calibration. (Figure 1)
3. Connect **TL1195** via the cable to the five pin header.

**CAUTION:** The line on the cable must face the inside wall of the sensor cavity. (Figure 1)

Figure 1 510 & 520 Calibration Setup

1. Power the unit on.
2. The printed circuit board inside the sensor cavity is marked with the number 2 or the number 5 near the 5 pin header. The boards may also be marked with “5232”, “5235” or have a yellow sticker. Please note this marking or if a sticker is present. This information will be needed in a future step.
3. Open SW0147 software from Start menu or the desktop shortcut. (Figure 2)



Figure SW0147 Shortcut

1. The screen will look similar to Figure 3. The toggle switch outlined in red in Figure 3 should be set as follows…
* Toggle the switch to the left if the number noted from the printed circuit board in step 5 is “2”, “5232” or if a yellow sticker is present.
* Toggle the switch to the right if the number noted from the printed circuit board in step 5 is “5” or “5235”.



Figure SW0147 Calibration Interface

Zero Trim

1. The “**Coarse –** **ZERO - Fine**”, “**Save ZERO**” and “**Read ZERO**” buttons may be used to trim the zero. All are described in this section.

**CAUTION**: The zero should be trimmed in at “zero” pressure.

1. There are coarse and fine adjustments available to trim the zero. They are in the box under the label “**Coarse –** **ZERO - Fine**”. The zero may be moved up and down in large or small steps by clicking on the up or down arrows in the left and right boxes, respectively. Click a button to make the desired adjustments. (See Figure 4)
2. Click the “**Save ZERO**” button below this section to save the changes to the zero.

**NOTE**: If the “**Save ZERO**” operation is not performed, the new settings will be lost when power is removed.

1. The current device setting may be read by pressing the button labeled “Read ZERO”. The set value may be any value between 0 and 1023 and may be used as a reference when adjusting the zero.

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Figure Zero Trim Buttons

# Span Trim

1. The “**Coarse –** **SPAN - Fine**”, “**Save SPAN**” and “**Read SPAN**” buttons may be used to trim the span. All are described in this section.

**CAUTION**: The span should be trimmed in with full-scale pressure applied to the unit.

1. There are coarse and fine adjustments available to trim the span. They are in the box under the label “**Coarse –** **SPAN - Fine**”. The span may be moved up and down in large or small steps by clicking on the up or down arrows in the left and right boxes, respectively. Click a button to make the desired adjustments. (See Figure 5)
2. Click the “**Save SPAN**” button below this section to save the changes to the span.

**NOTE**: If the “**Save SPAN**” operation is not performed, the new settings will be lost when power is removed.

1. The current device setting may be read by pressing the button labeled “Read SPAN”. The set value may be any value between 0 and 1023 and may be used as a reference when adjusting the span.



Figure Span Trim Buttons