

## Tutorial BU0836

Connecting the sensors is very simple with the BU0836 board:

You have to plug the 3-pole connector to the board.

On the left side of the pin-rows is printed the description of the connector: the red wire from the sensor has to be connected with the [+5V] pin.



So, if all sensors are connected, all red wires must be on the same side corresponding with the [+5V] label.

The brown cable means the GND line and the orange is the INPUT.

**Wrong connection will destroy the Hall-sensors.**

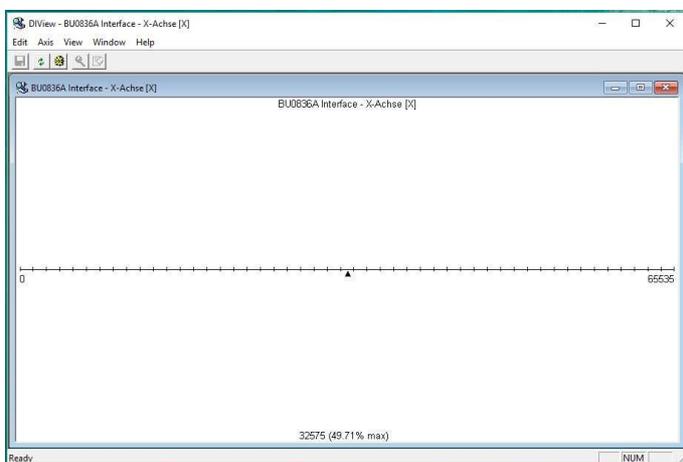
New axes must first be calibrated before use.

For this the Windows software DView is used. This can be obtained from the Leo Bodnar page [via this link](#).

Please connect the sensors first, then connect the board via USB with the PC and only then start the software.

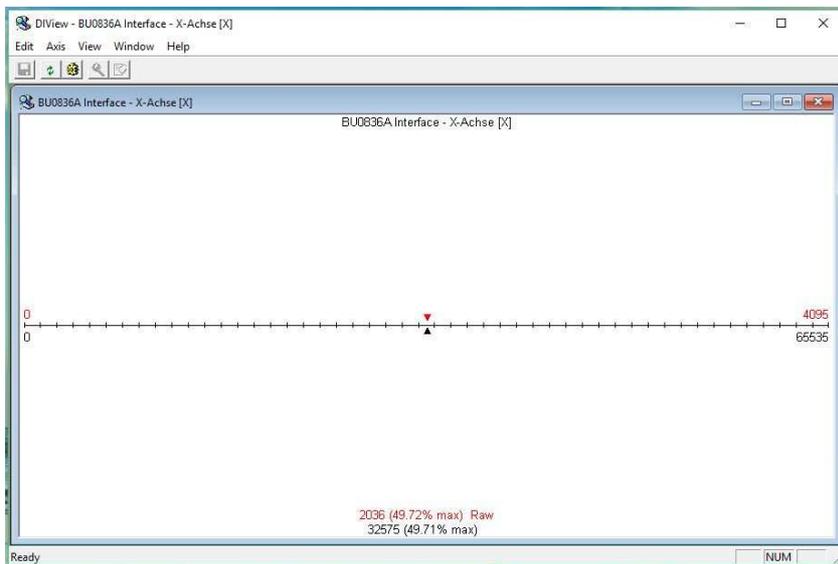
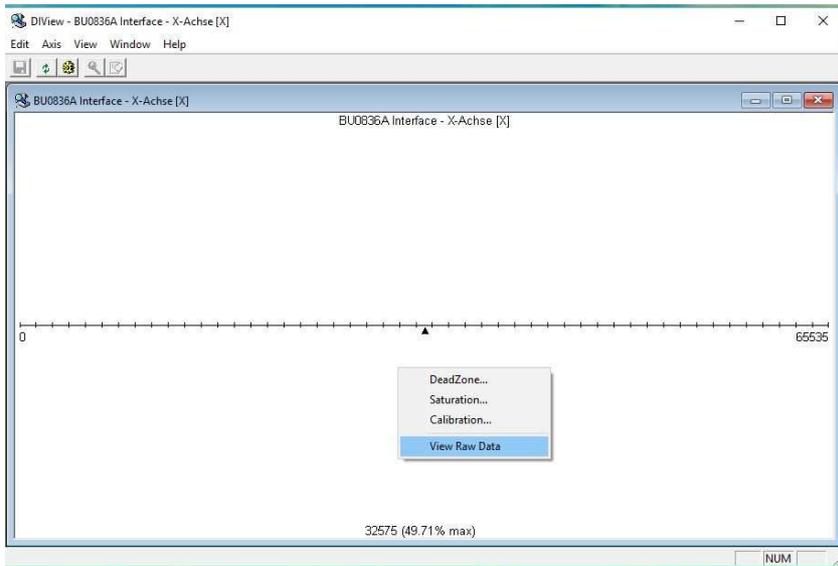
After starting the window shows all found Bodnar boards, as well as other input media like Keyboard and other.

For a better overview, I have closed all "unnecessary" windows in the pictures.



The picture matching the "new" sensor looks like the first picture.

In this window frame click with the right mouse button (right-handed mouse :-)) and activate the first "View Raw Data", now there is a red wedge above the line over the black wedge (Picture 2)



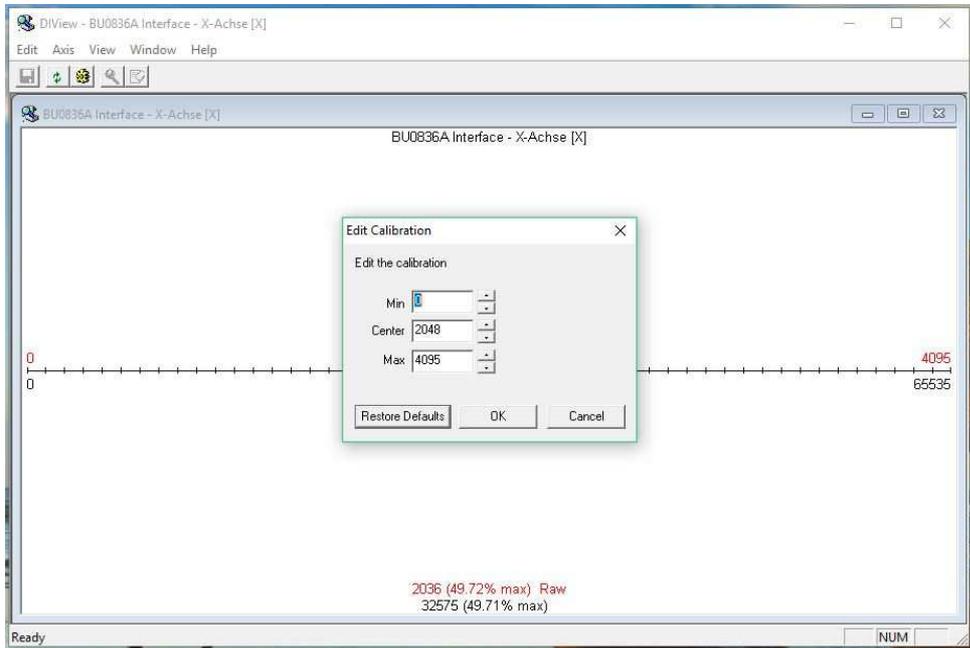
The red wedge indicates the value read out by the sensor.

(Due to the design, values between 20% and 70% are normal for our axes).

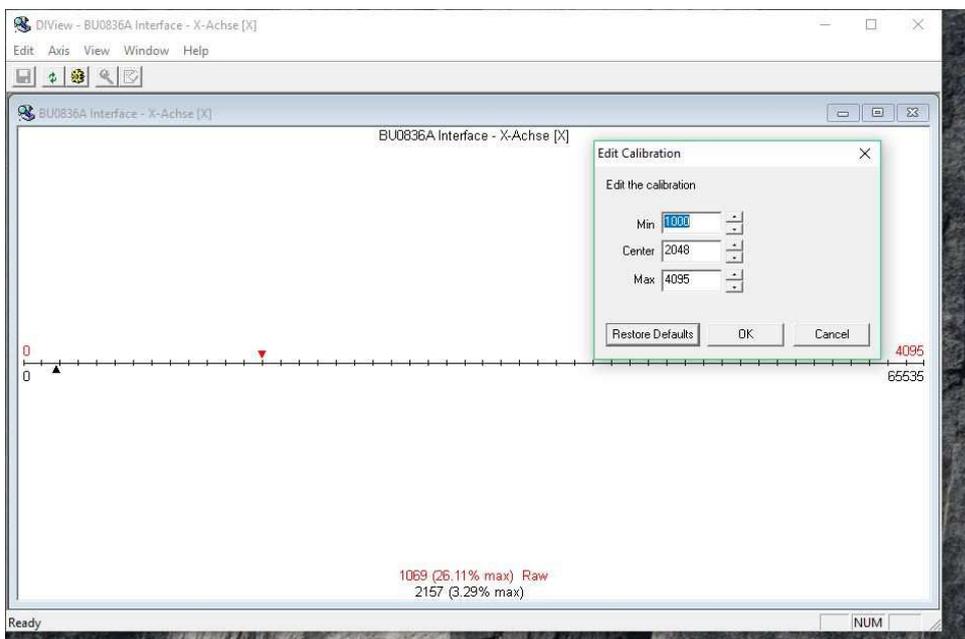
The value of the black wedge is the value Windows gets from the board.

So that Windows is now getting values from 0% to 100%, the values for the red wedge must be corrected.

Now open the window "Calibration" with a "right click" (picture 4), and enter a value in the "Min" field that is slightly above the smallest achievable value for the red wedge.



Close the window with "OK" to save the value in the board.



The black wedge now runs out of sync with the red one. Repeat this for the "max" value and keep a value slightly below the highest achievable value.

This calibrates the axis to values between 0% and 100%.

If you want to offset the center, e.g. for Collective you can also move the center value.

Please do this procedure for all connected axes.