Configuring a generic fuel level sensor with RS3

Question:
How can I configure a generic fuel level sensor using RS3?

Answer:
Once the sensor and the additional pull up resistor connected, you need to find the correspondence between voltage read by AiM device and fuel level in the tank and ensure that your AiM device reads this correspondence.

Proceed adding fuel step by step (eg. 3 litres at a time); at the same time enter Live Measures function with Race Studio 3 to read the voltage (mV) detected by AiM device in real time. Take note of millivolts and corresponding litres poured in the tank to complete sensor characterization.
Once all needed info collected, use Race Studio 3 **custom sensor** menu, to fill in collected values and make the software compute the sensor curve. The new sensor is now available to be set on an analog input.
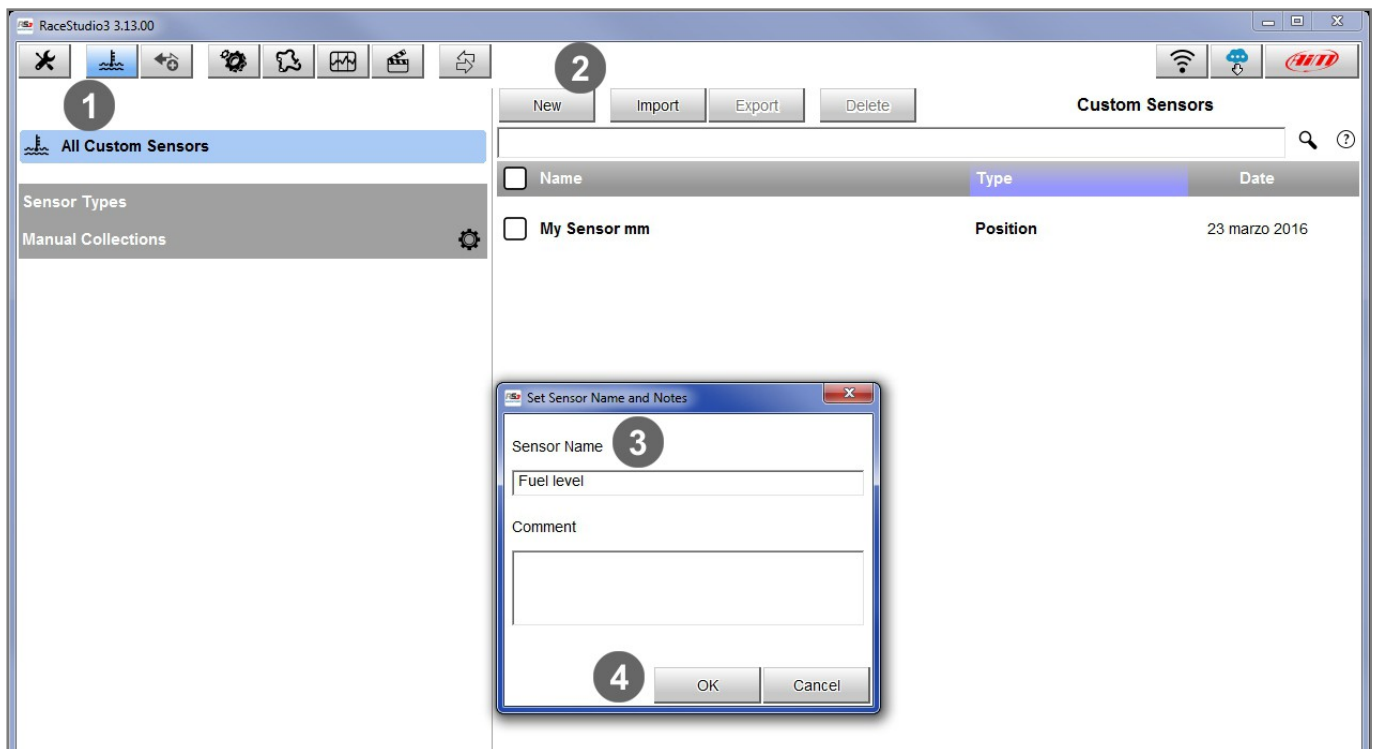
To read the values in millivolts using the mode Live Measures:
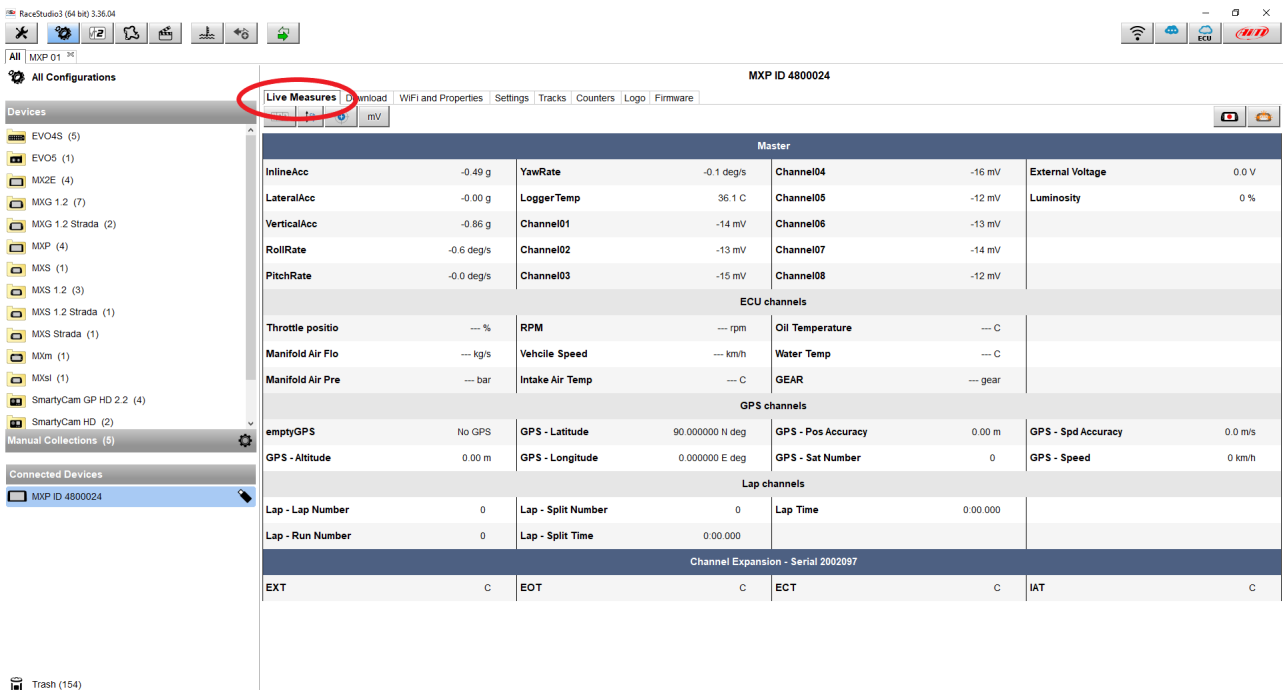
Race Studio 3

Proceed as follows:
- run the software, press "custom sensor" (**1**) to enter the related page;
- press "New" (**2**), fill in the sensor name (**3**) and press "OK" (**4**)
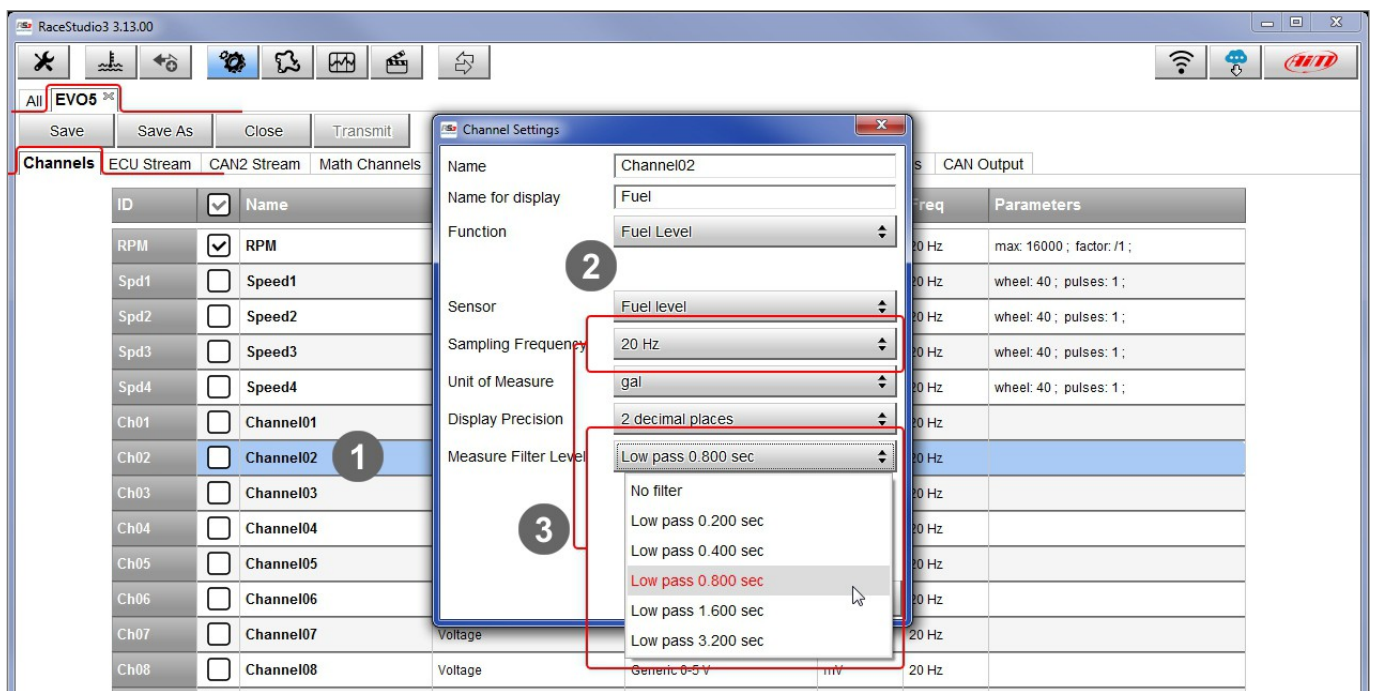
Race Studio 3

- set the box highlighted here below (**1**) as follows:
  - o Measure type :volume
  - o Calibration type: None
  - o input type: mV
- fill in the table below with the values collected adding rows (+) if needed
- press "Calc" (**2**)
- press "Save" (**3**)
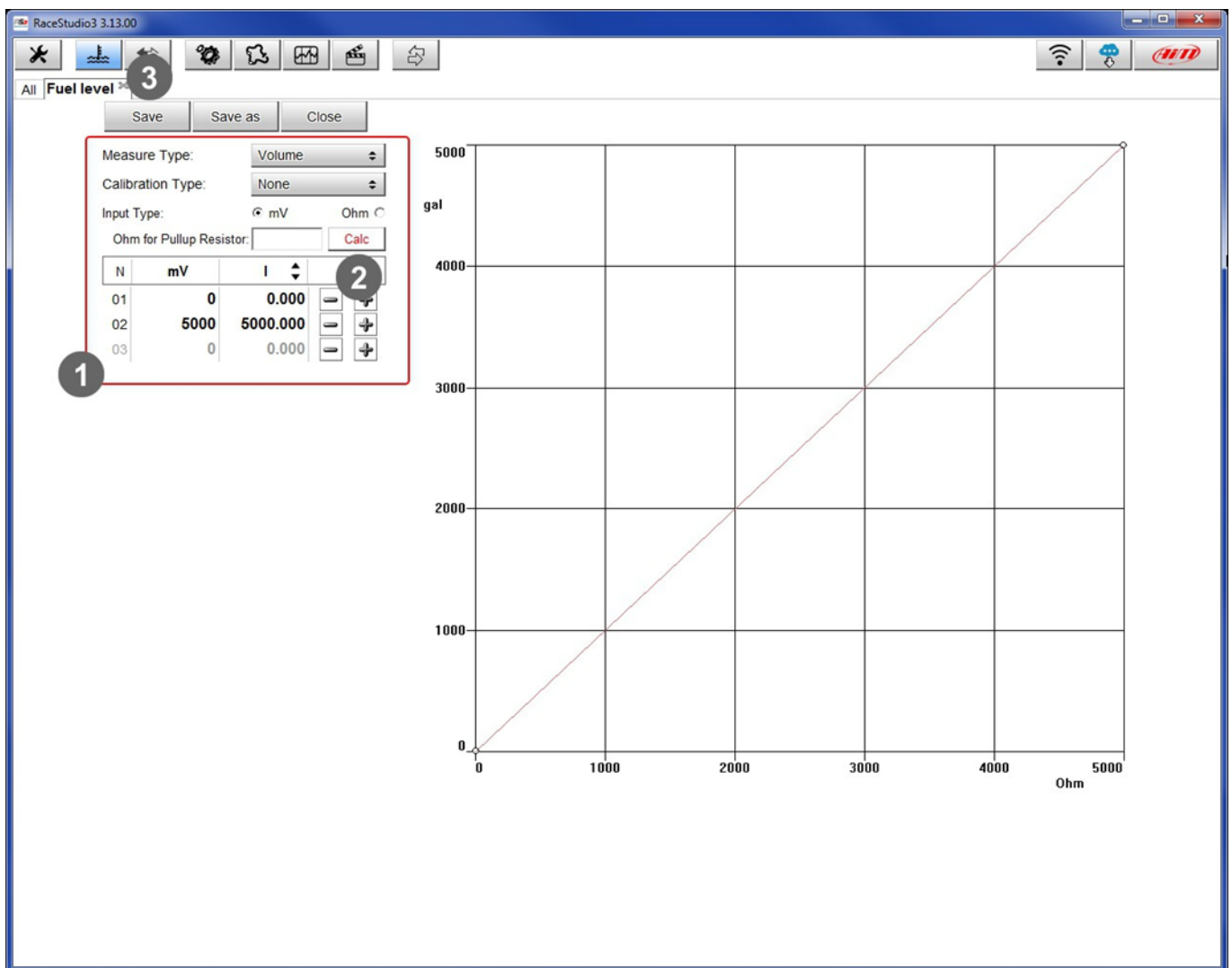
Race Studio 3

To load the sensor in your device configuration:

- select the configuration and the channel where to set the sensor on – in the example channel 2 – (**1**) and fill in the panel that shows up
- select Function: "Volume –> Fuel level" and Sensor: "Fuel level" (**2**)
- fill in the following fields keeping in mind that the Measure Filter Level is **strictly** connected to the sampling frequency (**3**) and press "Save" on the panel.

Race Studio 3

The software comes back to "Channels" layer and the sensor is set on the channel as shown below.

- Transmit the configuration to the device pressing "Transmit".