AiM Infotech

Car/bike linear potentiometer Race Studio 2 configuration – steering angle

Release 1.00

1 Introduction

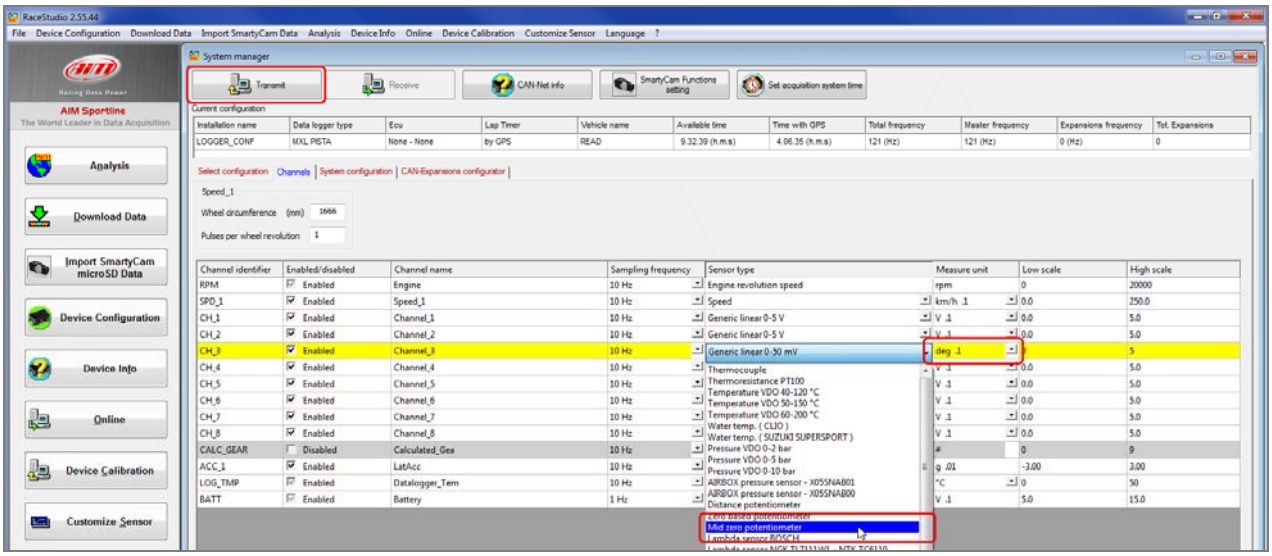
The car/bike linear potentiometer diameter is supported by both a AiM configuration software and can measure the dampers compression or extension as well as the steering rotation measured through the rack displacement. In this datasheet you will:

- load it in the logger configuration using **Race Studio 2**
- use it to measure **steering rotation** through the rack displacement

2 Setup with Race Studio 2

To load the potentiometer in AiM logger configuration, with the logger switched on and connected to a PC:

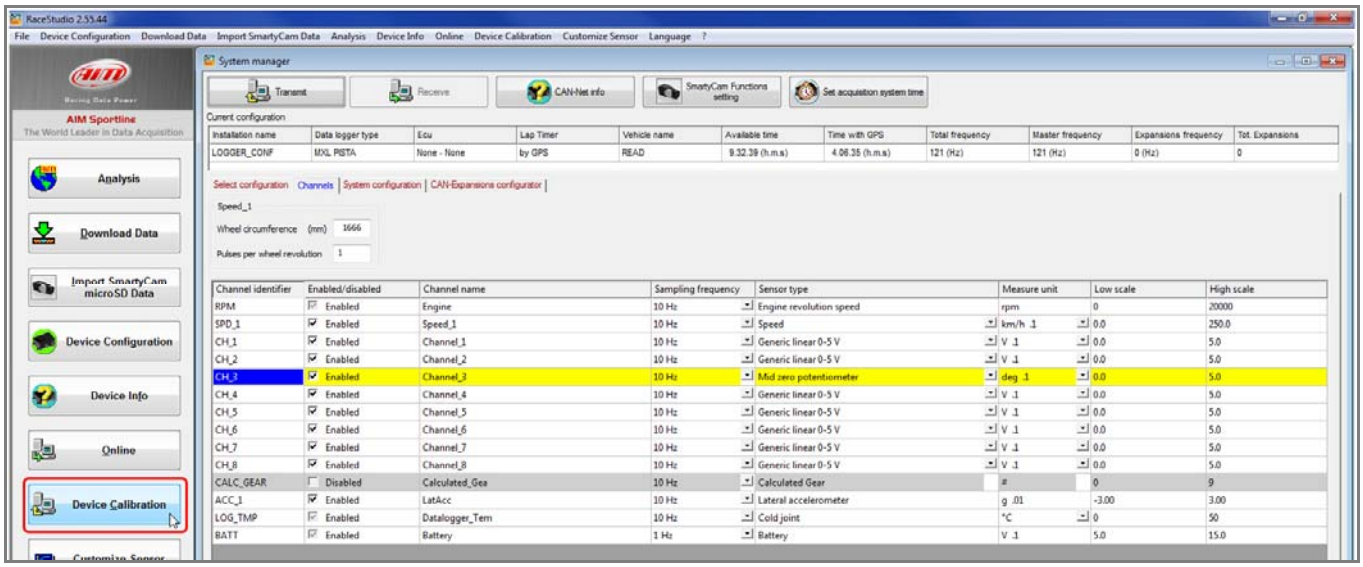
- run the software, select the logger in use and the configuration to set the potentiometer on
- enter "Channels" layer and select the channel where to set the potentiometer on (in the example channel 3); select "Mid zero potentiometer" in "Sensor type" column and "deg .1" in "Measure unit" column as shown here below.



- click out of the cell
- transmit the configuration to the logger pressing "Transmit" on the software top keyboard.

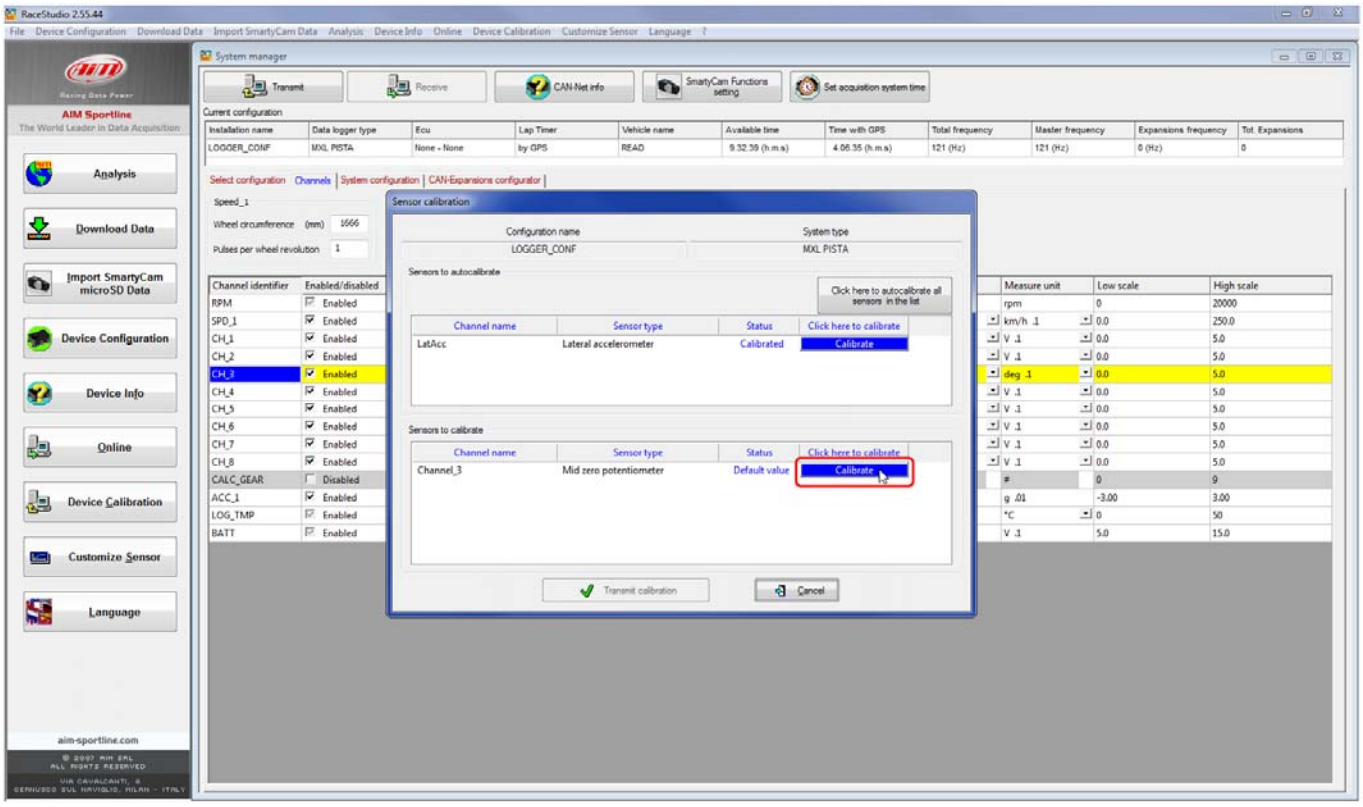
To calibrate the potentiometer:

- Press "Device Calibration"



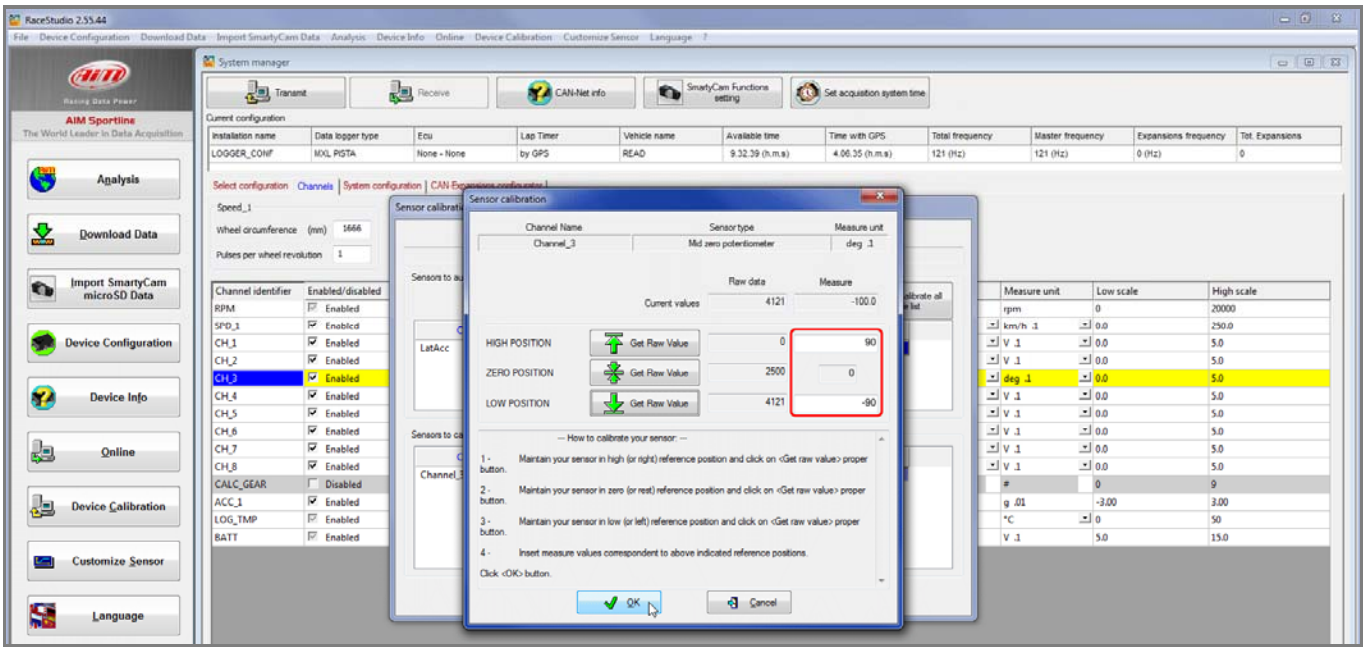
Calibration panel shows up:

- Press "Calibrate" button of "Mid zero potentiometer"

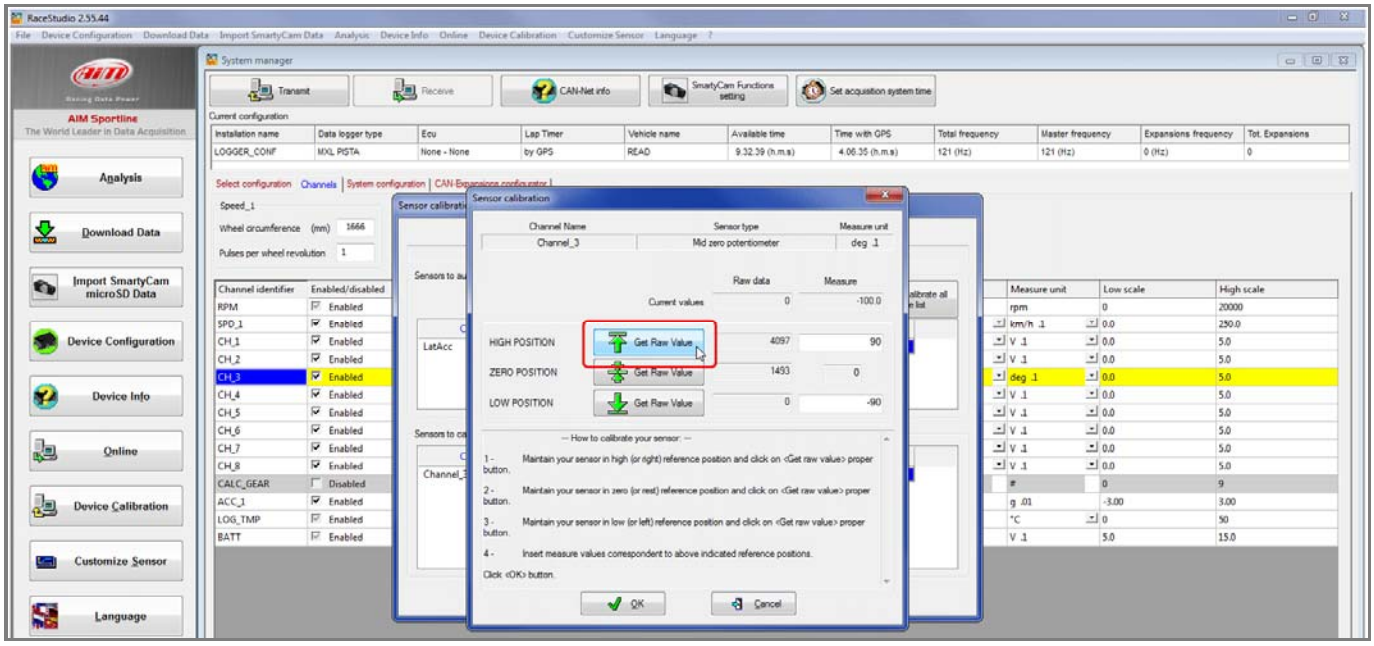


The software shows "Calibration panel" to learn the three calibration points:

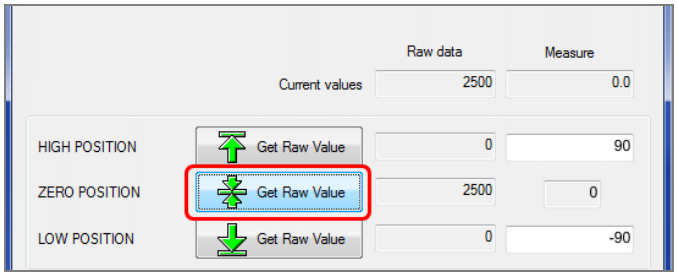
- manually fill in values corresponding to the three angular position: for example 90, 0 and -90.

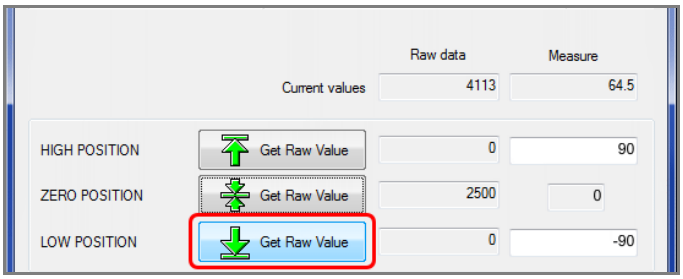


- swerve to the right according to the angle you wish to calibrate and press "Get raw value" corresponding to "High position"



- place the steering in its zero position and press "Get raw value" corresponding to "Zero position" (image below on the left)
- swerve to the left according to the angle you wish to calibrate and press "Get raw value " corresponding to "Low position" (image below on the right)





- press OK

When calibration is over potentiometer status will turn to "Calibrated" and become red:

- Transmit the calibration to the logger pressing "Transmit Calibration"