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 an 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"