AiM Infotech

Car / bike linear potentiometer
Race Studio 3 configuration – steering angle

Release 1.01
1 Introduction

The car/bike linear potentiometer is supported by both 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 3
- use it to measure steering rotation through the rack displacement

2 Setup with Race Studio 3

To load the potentiometer in the logger configuration, with the logger switched on and connected to the PC, run the software and select the configuration you are going to load it on.
Enter the configuration (in the example MXL2 03) and the related "Channels" layer.

- Select the channel where to set the potentiometer on – in the example channel 5 (1) and fill in the panel that shows up; tip: you can name the channel (in the example "Channel06")
- Function: "Angle" (2)
- Sensor: "Angular Pot. Calib" (3 – this implies that the potentiometer will be calibrated as shown in the following pages)
- Fill in the other fields
- Fill "Total Potentiometer travel" box with the potentiometer travel in degrees: 180° (4)
- Click "Save"
When the software comes back to "Channels" layer the potentiometer has been set on the desired channel as shown here below.

- Transmit the configuration to the logger pressing "Transmit" on the top keyboard.
To calibrate the potentiometer:

- enter "All" layer and press "Device" (1)
- select the logger – in the example MXL2 ID 410 (2)
- in "Live Measures" layer press "Calibrate" (3) and select the channel where the potentiometer was set (in the example channel 5)
The software shows calibration page:

- fill in threshold values -90 and 90 in the proper cells (1)
- keeping the potentiometer completely closed press "Set point A" (2)

- completely open the potentiometer and press "Set point B"
- press "Save"