AiM Infotech

Rotary potentiometer for car/bike/kart
Race Studio 3 configuration – steering angle

Release 1.00
1 Introduction

This datasheet explains how to set up with Race Studio 2 the rotary potentiometer. AiM loggers can measure the displacement between two points using a sensor (rotary potentiometer) directly connected to the two measure points. This potentiometer can measure the angular displacement like those of the steering wheel.

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”