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# K type thermocouple Car/bike/kart installations Race Studio 2 configuration

Release 1.00



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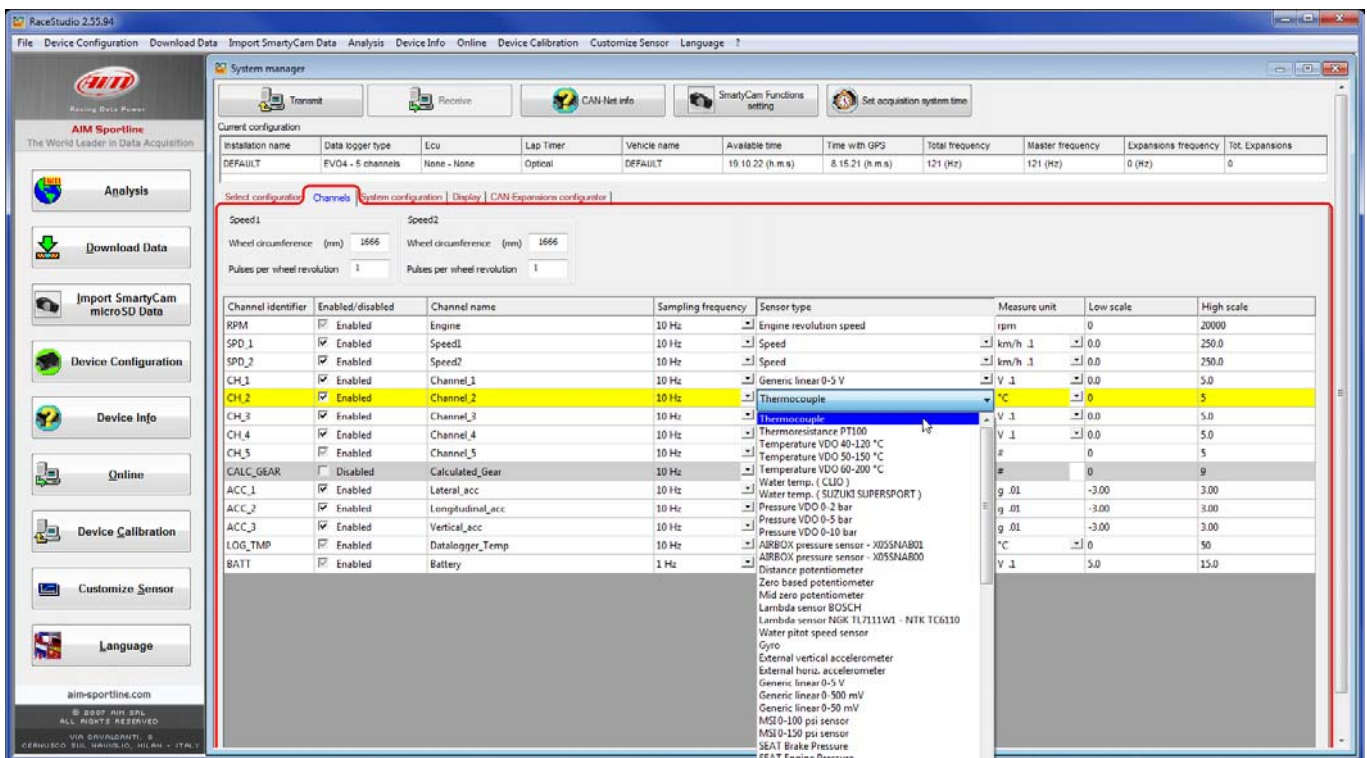
# 1 Introduction

When the K type thermo couple is physically connected to one channel of AiM device it is necessary to load it in the related configuration - configuration with AiM configuration software. In this datasheet it is loaded using **Race Studio 2** software.

# 2 Race Studio 2 configuration

To load the sensor in the device configuration:

- run the software, select the logger in use (i.e. EVO4) and the configuration where to load the sensor on and enter "Channel" layer;
- choose the channel where to set the sensor on (i.e. channel 2) and select "Thermocouple" in "Sensor type" column as shown below.





The sensor is set on the desired channel. Transmit the configuration to the logger pressing "Transmit".

The screenshot shows the RaceStudio 2.55.94 software interface. The 'System manager' window is active, displaying the 'Current configuration' section. A red box highlights the 'Transmit' button. Below it, the 'Select configuration' tab is selected, showing a table of sensor configurations. The 'CH\_2' row is highlighted in yellow, and a red box highlights the 'Thermocouple' sensor type in the 'Sensor type' column. The 'Measure unit' is set to '°C' and the 'High scale' is set to '5'. The 'Wheel circumference' and 'Pulses per wheel revolution' are both set to 1666.

Channel identifier	Enabled/disabled	Channel name	Sampling frequency	Sensor type	Measure unit	Low scale	High scale
RPM_1	<input checked="" type="checkbox"/> Enabled	Engine	10 Hz	Engine revolution speed	rpm	0	20000
SPD_1	<input checked="" type="checkbox"/> Enabled	Speed1	10 Hz	Speed	km/h	-0.0	250.0
SPD_2	<input checked="" type="checkbox"/> Enabled	Speed2	10 Hz	Speed	km/h	-0.0	250.0
CH_1	<input checked="" type="checkbox"/> Enabled	Channel_1	10 Hz	Generic linear 0-5 V	V	-0.0	5.0
CH_2	<input checked="" type="checkbox"/> Enabled	Channel_2	10 Hz	Thermocouple	°C	0	5
CH_3	<input checked="" type="checkbox"/> Enabled	Channel_3	10 Hz	Generic linear 0-5 V	V	-0.0	5.0
CH_4	<input checked="" type="checkbox"/> Enabled	Channel_4	10 Hz	Generic linear 0-5 V	V	-0.0	5.0
CH_5	<input checked="" type="checkbox"/> Enabled	Channel_5	10 Hz	Generic linear 0-5 V	V	-0.0	5.0
CALC_GEAR	<input type="checkbox"/> Disabled	Calculated_Gear	10 Hz	Calculated Gear	#	0	9
ACC_1	<input checked="" type="checkbox"/> Enabled	Lateral_acc	10 Hz	Lateral accelerometer	g	-3.00	3.00
ACC_2	<input checked="" type="checkbox"/> Enabled	Longitudinal_acc	10 Hz	Longitudinal accelerometer	g	-3.00	3.00
ACC_3	<input checked="" type="checkbox"/> Enabled	Vertical_acc	10 Hz	Vertical internal accelerometer	g	-3.00	3.00
LOG_TMP	<input checked="" type="checkbox"/> Enabled	Datalogger_Temp	10 Hz	Cold joint	°C	0	50
BATT	<input checked="" type="checkbox"/> Enabled	Battery	1 Hz	Battery	V	5.0	15.0