

AiM Infotech

Configuration with Race Studio3 of Car/bike/kart cylinder head thermocouple

Release 1.02



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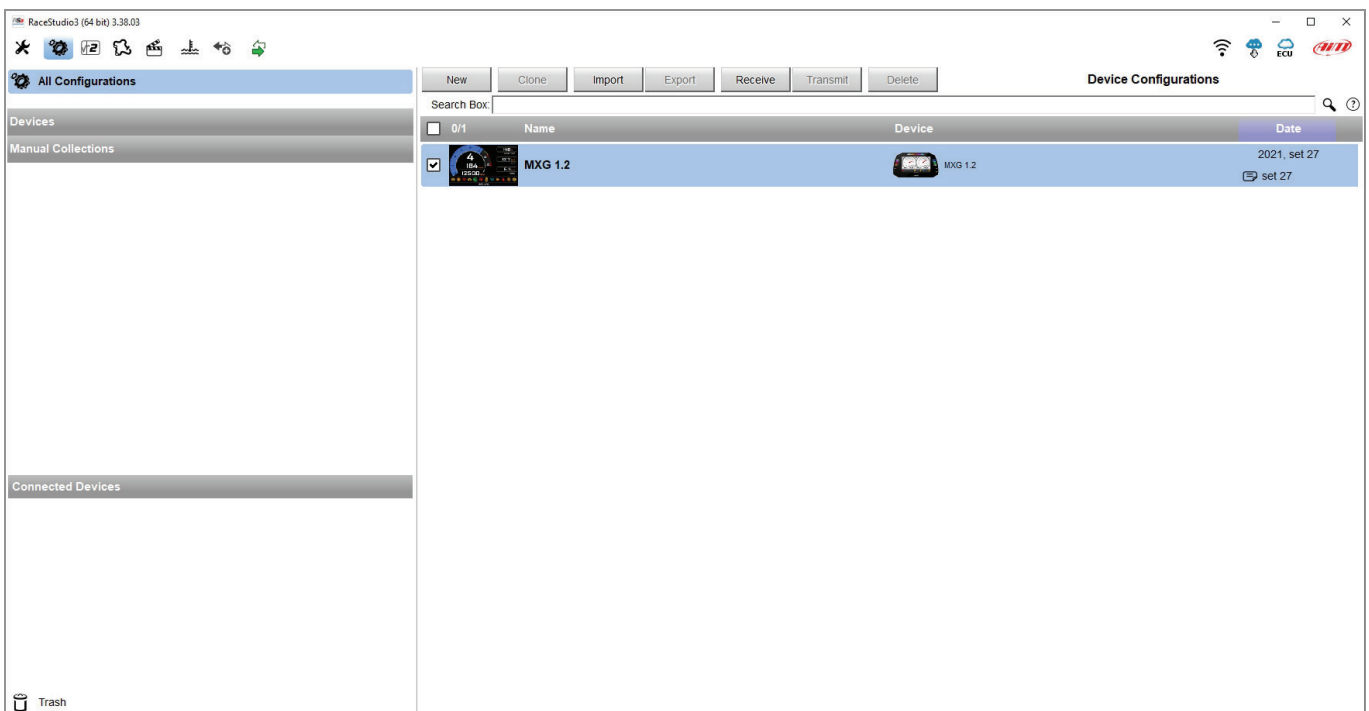
Introduction

When the cylinder head thermocouple is physically connected to one channel of AiM device you need to load it in the related configuration using **Race Studio 3** software.

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Race Studio 3 configuration

To load the sensor in the device configuration run the software and select the configuration where to load it (MXG 1.2 in the example below):



The software enters "Channels" layer: select the channel where to set the sensor on and fill in the panel that is prompted.

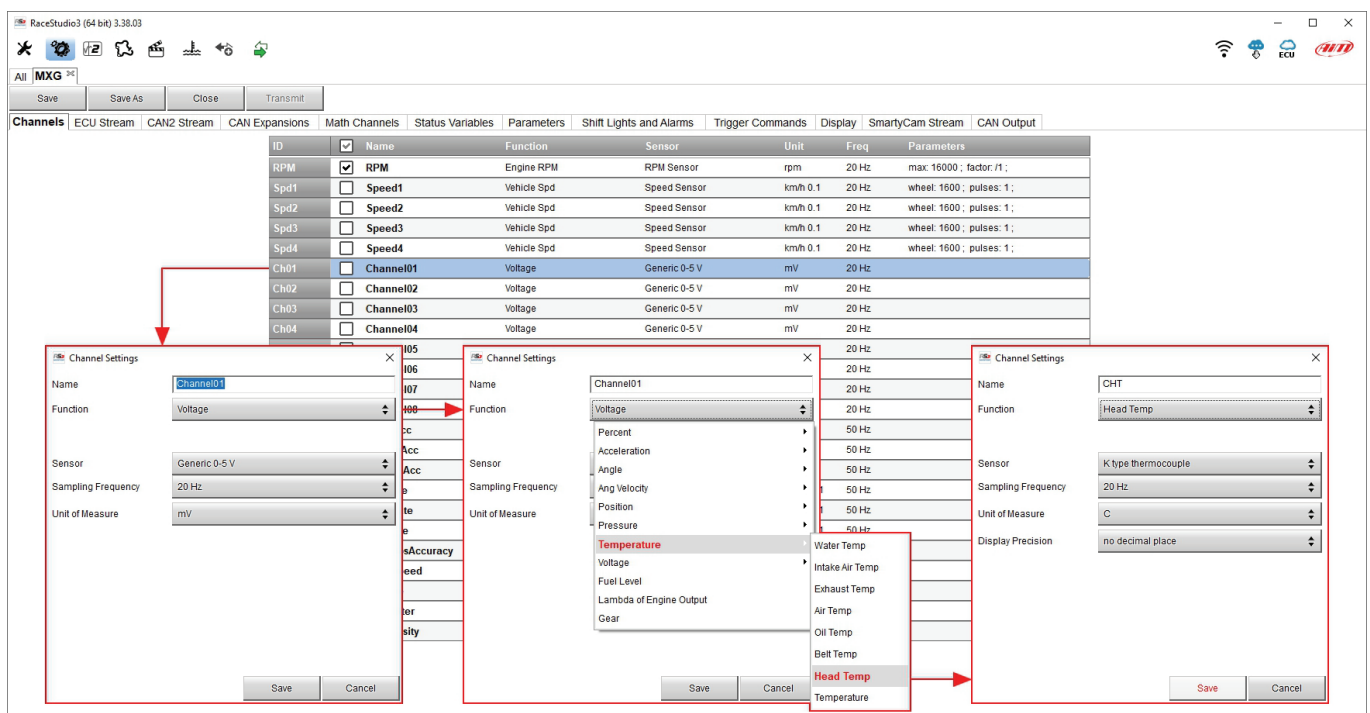
Please note: different AiM loggers have different channels management; this is why channels setting panel is different according to the device configuration you are loading the sensor in.

AiM devices that manage the channels only as **analog** are:

- SW4
- EVO5
- EVO4S
- MXL2/ MXG/MXS/MXS Strada
- MXm
- MXK10 Gen4
- MXK10 Gen5

To configure the sensor:

- click the channel you want to set the sensor on
- "Channel setting" panel is prompted: select "Temperature ->Head Temp" function
- the software sets automatically on: "K type thermocouple"
- press "Save"



AiM devices that manages channels both as **analog and as digital** are:

- MX2E
- MXS 1.2/MXP/MXG 1.2
- MXS 1.2 Strada/MXP Strada/MXG 1.2 Strada
- MXL2/ MXG/MXS/MXS Strada
- MXsl

To configure the temperature sensor:

- click the channel you want to set the sensor on
- "Channel setting" panel is prompted: select "Analog" management
- select "Temperature ->Head Temp" function
- the software sets automatically on "K type thermocouple"
- press "Save"

The screenshot shows the RaceStudio3 (64 bit) 3.38.03 interface. A table lists channels with columns for ID, Name, Function, Sensor, Unit, Freq, and Parameters. Channel01 is selected. Three 'Channel Settings' dialog boxes are overlaid, showing the configuration process:

ID	Name	Function	Sensor	Unit	Freq	Parameters
RPM	<input checked="" type="checkbox"/> RPM	Engine RPM	RPM Sensor	rpm	20 Hz	max: 16000 ; factor: 1 ;
Spd1	<input type="checkbox"/> Speed1	Vehicle Spd	Speed Sensor	kmh 0.1	20 Hz	wheel: 1600 ; pulses: 1 ;
Spd2	<input type="checkbox"/> Speed2	Vehicle Spd	Speed Sensor	kmh 0.1	20 Hz	wheel: 1600 ; pulses: 1 ;
Spd3	<input type="checkbox"/> Speed3	Vehicle Spd	Speed Sensor	kmh 0.1	20 Hz	wheel: 1600 ; pulses: 1 ;
Spd4	<input type="checkbox"/> Speed4	Vehicle Spd	Speed Sensor	kmh 0.1	20 Hz	wheel: 1600 ; pulses: 1 ;
Ch01	<input checked="" type="checkbox"/> Channel01	Voltage	Generic 0-5 V	mV	20 Hz	
Ch02	<input checked="" type="checkbox"/> Channel02	Voltage	Generic 0-5 V	mV	20 Hz	

The first dialog box shows 'Channel01' with 'Analog' selected and 'Voltage' as the function. The second dialog box shows 'Channel01' with 'Analog' selected and 'Temperature' selected in the function list. The third dialog box shows 'Channel01' with 'Analog' selected and 'Head Temp' selected in the function list. Red arrows indicate the sequence of steps.