



Race Studio 3

Alarm light signal configuration with RS3

Question:

How do I configure the alarm sensor through RS3?

Answer:

The alarm sensor configuration on your AiM device can be performed this way:

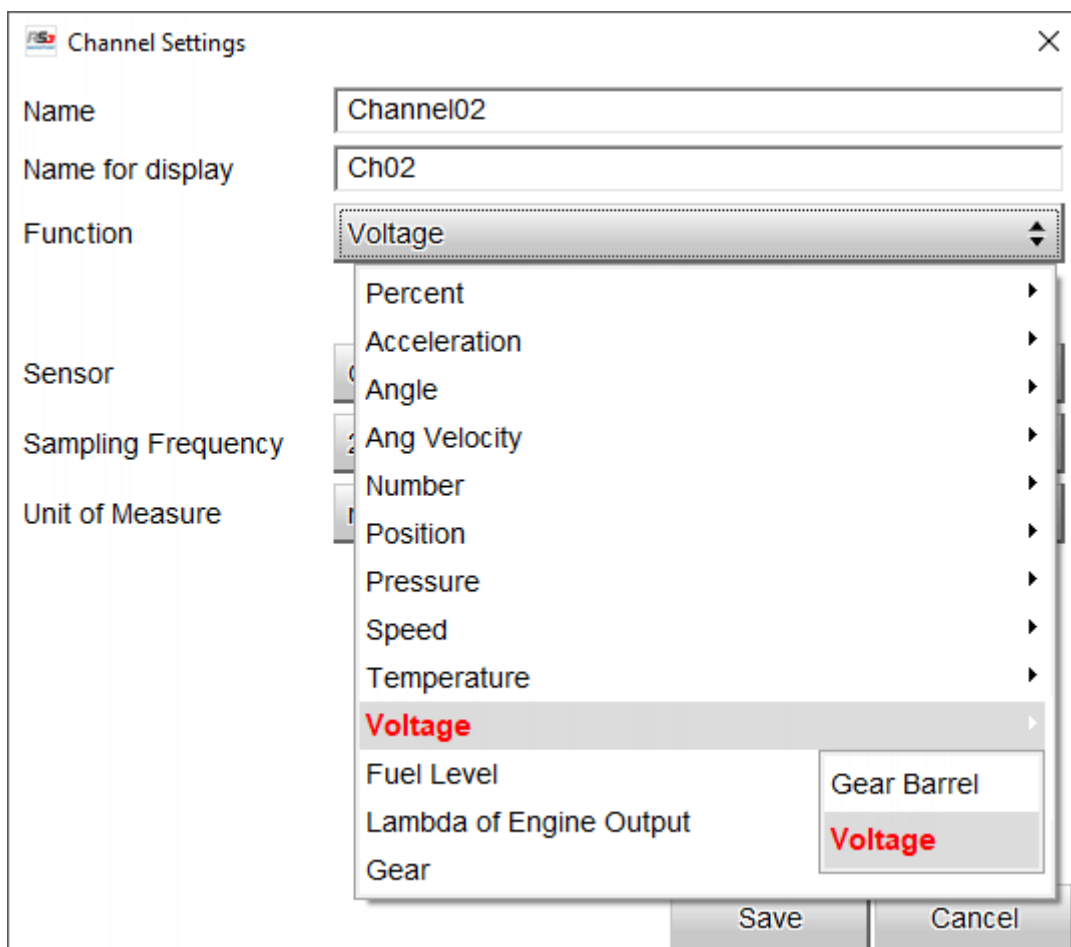
- run RS3.
- enter "Configuration" section and select the configuration to be modified or create a new one if necessary (in the example, an EVO4S configuration have been chosen).
- "Channels" layer appears showing all the available channels with their functions.

The screenshot shows the RaceStudio3 3.16.00 software interface. The 'Channels' tab is selected, displaying a table of available channels and their configurations. The table has columns for ID, Name, Function, Sensor, Unit, Freq, and Parameters. All channels are checked with a checkbox in the ID column.


ID	✓	Name	Function	Sensor	Unit	Freq	Parameters
RPM	✓	RPM	Engine RPM	RPM Sensor	rpm	20 Hz	max: 16000 ; factor: /1 ;
Spd1	✓	Speed1	Vehicle Spd	Speed Sensor	km/h 0.1	20 Hz	wheel: 1600 ; pulses: 1 ;
Spd2	✓	Speed2	Vehicle Spd	Speed Sensor	km/h 0.1	20 Hz	wheel: 1600 ; pulses: 1 ;
Ch01	✓	Channel01	Voltage	Generic 0-5 V	mV	20 Hz	
Ch02	✓	Channel02	Voltage	Generic 0-5 V	mV	20 Hz	
Ch03	✓	Channel03	Voltage	Generic 0-5 V	mV	20 Hz	
Ch04	✓	Channel04	Voltage	Generic 0-5 V	mV	20 Hz	
Ch05	✓	Channel05	Voltage	Generic 0-5 V	mV	20 Hz	
Acc1	✓	InlineAcc	Inline Accel	AIM Internal Accelerometer	g 0.01	50 Hz	
Acc2	✓	LateralAcc	Lateral Accel	AIM Internal Accelerometer	g 0.01	50 Hz	
Acc3	✓	VerticalAcc	Vertical Accel	AIM Internal Accelerometer	g 0.01	50 Hz	
Gyr1	✓	RollRate	Roll Rate	AIM Internal Gyro	deg/s 0.01	50 Hz	
Gyr2	✓	PitchRate	Pitch Rate	AIM Internal Gyro	deg/s 0.01	50 Hz	
Gyr3	✓	YawRate	Yaw Rate	AIM Internal Gyro	deg/s 0.01	50 Hz	
Accu	✓	GPS Accuracy	GPS Accuracy	AIM GPS	mm	10 Hz	
Spd	✓	GPS Speed	Vehicle Spd	AIM GPS	km/h 0.1	10 Hz	
Alt	✓	Altitude	Altitude	AIM GPS	m	10 Hz	
Od0	✓	Odometer	Odometer Total	AIM ODO	km	1 Hz	

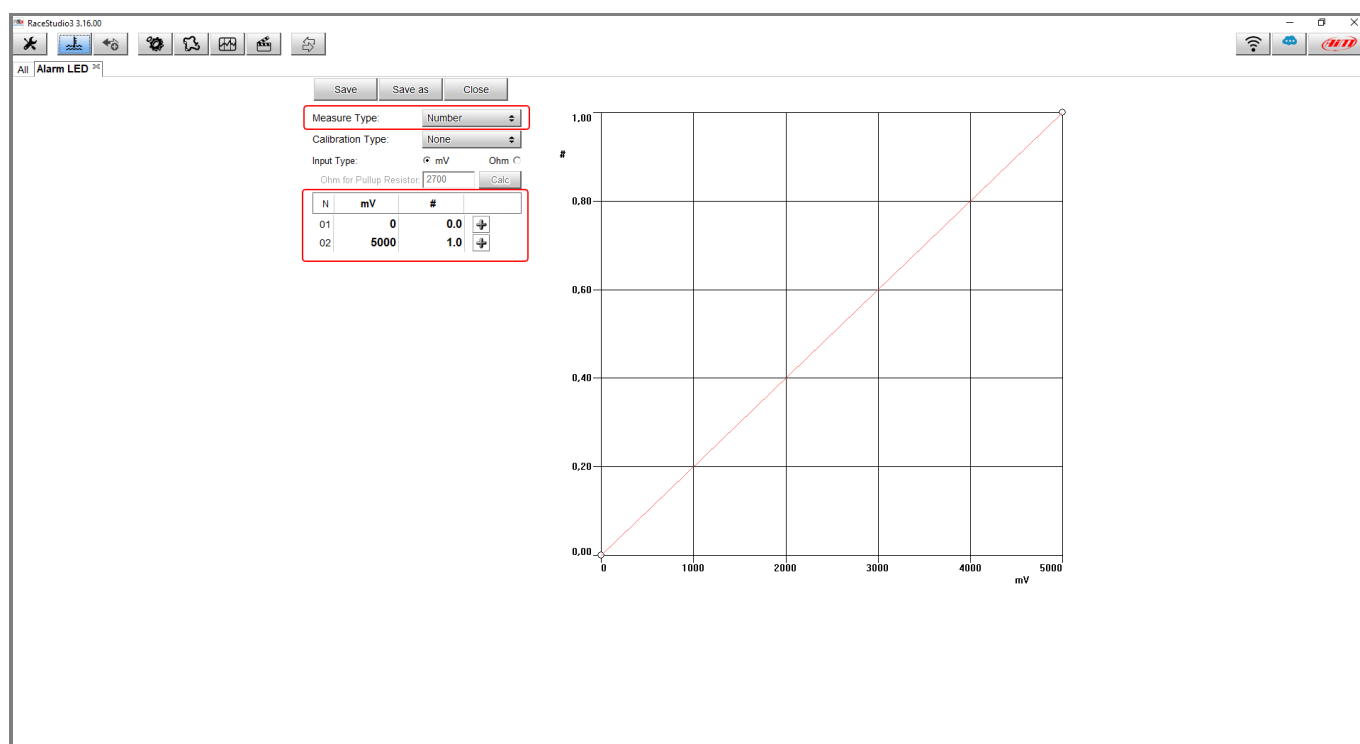
Race Studio 3

- Click “Function” in the analog channel menu (be sure it is enabled) and choose “Voltage” or “Number” function, then choose the sensor type among these that appear clicking “Sensor”.
 - **Voltage:** Volts (V) or milliVolts (mV) are the available measurement units, shown as whole number or with maximum three decimal places; user can set the sampling frequency.
 - **Number:** to make this option appear in channel function menu you need to previously create a Custom Sensor.



Race Studio 3

To create a custom sensors press the related icon  on the software top left keyboard: select Measure type "Number" and fill the table below with the related sensor values in Mv (with switch on and off). The recorded value is shown as whole number or with one decimal place in a 0-1 range, corresponding respectively to 0 mV and 5000 mV.



Race Studio 3

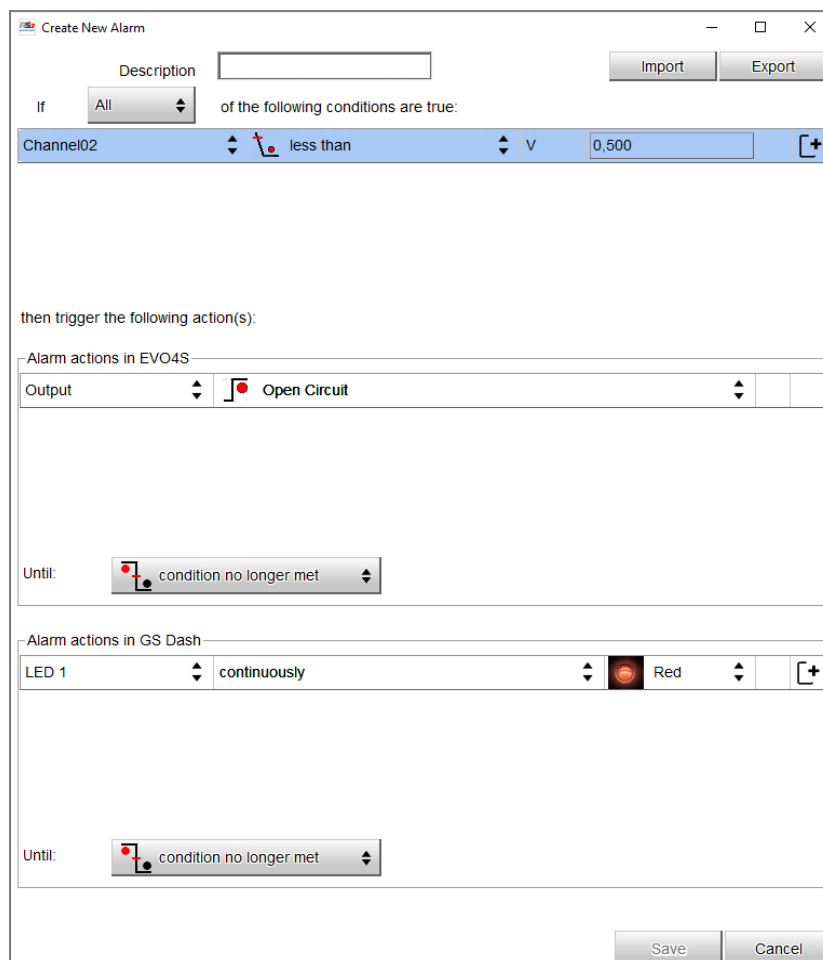
To set the alarm LEDs of your AiM device, select the LEDs and display settings layers, to say:

- “Shift Lights and Alarms” layer for MXG 1.2/MXG 1.2 Strada, MXS 1.2/MXS 1.2 Strada, MXP/MXP Strada, MXm and MXL2.
- “Dashes” -> “Shift Lights and Alarms” layer for EVO/4S/5 (it is necessary to specify the dash type).

Choose which one among the available LEDs will show the alarm signal, set the reference channel with its threshold:

- Voltage: threshold 2,5V
- Number: threshold 0,5 (be sure that the channel is configured to be shown with one decimal place).

Once the process is over, click “Transmit” to transmit the configuration to your device. In the following example, an EVO4S configuration is shown.



Create New Alarm

Description:

If: **All** of the following conditions are true:

Channel02 **less than** V 0,500 **[+]**

then trigger the following action(s):

Alarm actions in EVO4S

Output **[+]** **Open Circuit**

Until: **[+]** **condition no longer met**

Alarm actions in GS Dash

LED 1 **[+]** **continuously** **[+]** **Red**

Until: **[+]** **condition no longer met**

Save **Cancel**