

MaxxECU

engine management

English Manual MaxxECU Traction Module

2015-02-18



Important information!
(must be read before installation)

Maxxtuning.eu

Dynotuning ■ Engine Management ■ Motorsport

1 - Traction module overview

Text marked with "blue" in this manual are references to the PC program MTune. Internal references to sections or pictures are made with **bold text**. MTune screenshots of version 1.70.

Inputs:

VR 1-4. Speedsensors (ex. ABS-sensor, gearbox sensor, driveshaft sensor etc.).

Digital in 1-6. Internal pullup by 5V. Activated by ground (not 12V).

Input 1-5 can be used for speed sensors or other pulsed signals such as Ethanol sensor and switches.

Input 6 is only for switches and other "slow" functions, see settings in MTune!

Analog in 0-5v 1-8. Used for 0-5v sensors. Use only the +5V output of the traction module or 12V from the same fuse as the module for sensor supply. Connect the sensor ground to the sensor GND of the module.

Tempsensor 1-4. Used for NTC temperature sensors (not Type-K). Used for water, oil, etc.

Sensor ground is connected to the sensor GND of the module.

Accelerometer. 3-axis up to 8G.

Outputs:

+5V sensor supply. Power supply for sensors connected to the module. **Must not be connected to +5V output of the ECU.**

Output 1-3 (low). Grounding outputs, 1.5A max load per output. The load is connected between +12V and the output.

Output 4-8(high). +12V driving output, 1.5A max load per output. The load is connected between ground and the output.

Output 0-5V 1-2. Controlled via adjustable tables in MTune. 50mA max load per output..

Supply voltage: 8-24v

Power consumption: 0.1A

2 - Input / Output CMC 48-pin connector, brown

CMC	Label	CMC	Label
A1	VR 1 +	G1	TEMP SENSOR 1
A2	VR 1 GND	G2	TEMP SENSOR 2
A3	VR 2 +	G3	SENSOR GND
A4	VR 2 GND	G4	SENSOR GND
B1	VR 3 +	H1	TEMP SENSOR 3
B2	VR 3 GND	H2	TEMP SENSOR 4
B3	VR 4 +	H3	5V SENSOR SUPPLY
B4	VR 4 GND	H4	5V SENSOR SUPPLY
C1	DIGITAL IN 1	J1	ANALOG OUT 1
C2	DIGITAL IN 2	J2	ANALOG OUT 2
C3	DIGITAL IN 3	J3	5V SENSOR SUPPLY
C4	DIGITAL IN 4	J4	5V SENSOR SUPPLY
D1	ANALOG 0-5V IN 7	K1	CAN L
D2	ANALOG 0-5V IN 2	K2	CAN H
D3	DIGITAL IN 5	K3	OUT 7 HIGH
D4	DIGITAL IN 6	K4	OUT 8 HIGH
E1	ANALOG 0-5V IN 6	L1	OUT 1 LOW
E2	ANALOG 0-5V IN 4	L2	OUT 2 LOW
E3	SENSOR GND	L3	OUT 3 LOW
E4	SENSOR GND	L4	POWER GND
F1	ANALOG 0-5v IN 3	M1	OUT 4 HIGH
F2	ANALOG 0-5v IN 1	M2	OUT 5 HIGH
F3	ANALOG 0-5v IN 5	M3	OUT 6 HIGH
F4	ANALOG 0-5v IN 8	M4	12V SUPPLY

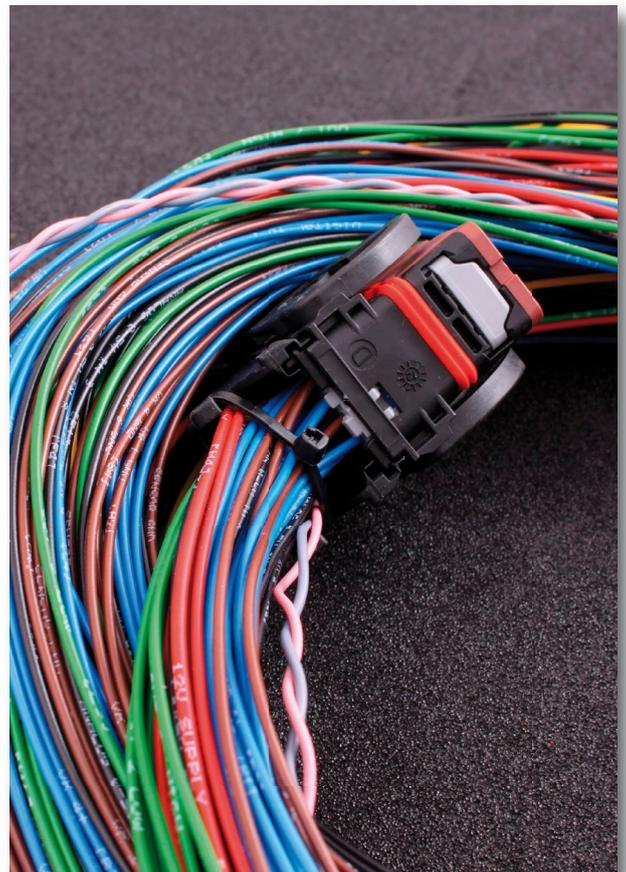


Fig 2a - All cables in the wiring harness has logical colors and labels to speed up and simplify the installation process.

3 - Installation of module

For the module to function properly (and optimal), the module must be mounted flat and at right angles to the vehicle's direction of travel. The module can be mounted in any direction as long as it is inline to the direction of travel.

The direction of the acceleration is set in MTune, se **Fig 3c**.



Fig 3a - The supplied rubber grommets must be used for mounting the module, otherwise the accelerometers wont work properly.

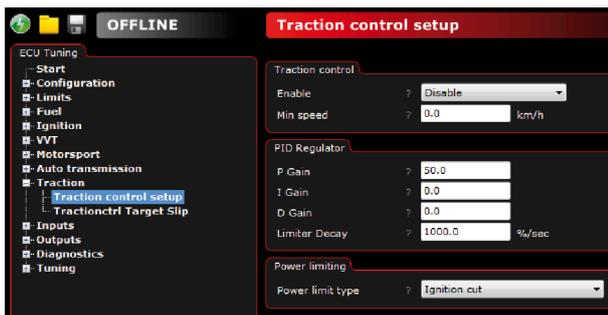


Fig 3b - When Traction module is enabled (Configuration → CAN settings → Traction module), MTune will expand it's settings for Traction capabilities, extra inputs and outputs.

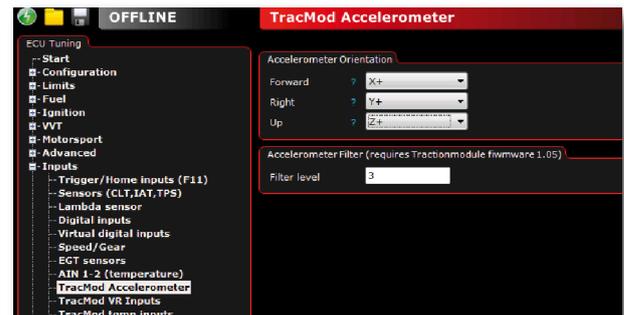


Fig 3c - Inputs → TracMod Accelerometer configures how the module is located in relation to the vehicles direction of travel. Extra inputs on module can be configured under **Inputs**.

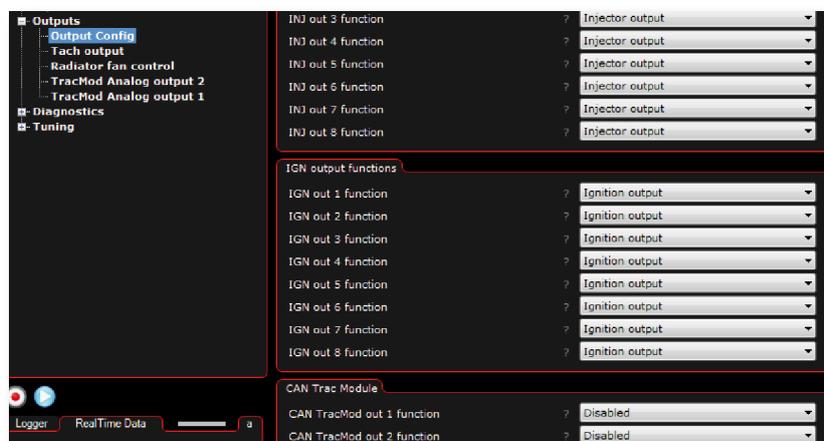
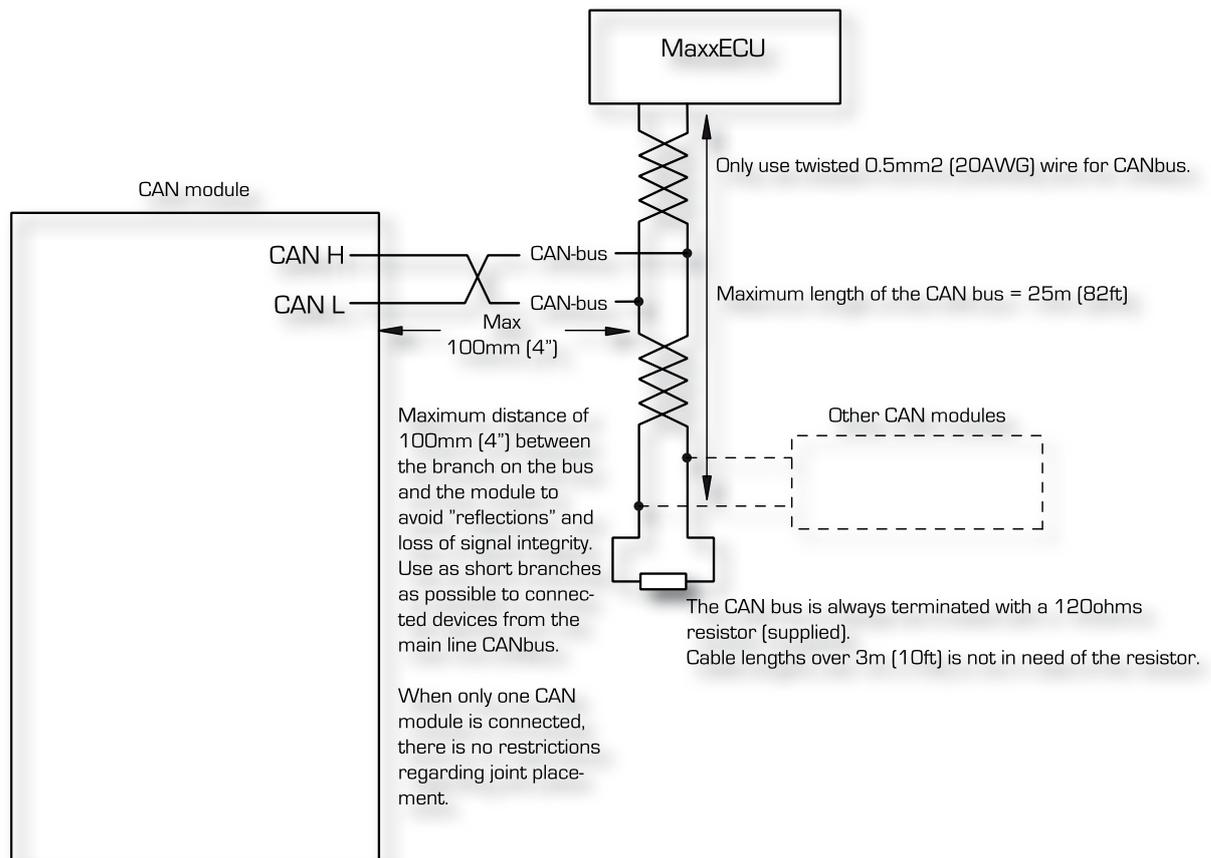


Fig 3d - All extra outputs can be configured in MTune under **Outputs**. Outputs → Output Config → CAN Trac Module

4 - CAN-bus installation



5 - Examples of sensors that can be connected to MaxxECU Traction module

