

# SEAT LEON CUP RACER 2016

## TECHNICAL NOTE 01/2016

### TCR SCRUTINEERING KIT

SEAT Sport reference: 5F6129101A

**Net price: 2.000€**



SEAT Sport offers to customers the "Scrutineering data logger", **compulsory for the TCR International** and in many of the TCR National championships.  
(TCR Benelux, TCR Germany, VLN,...)

**The kit can be installed in the new cars under customer request.**

The SEAT Sport reference includes :

- AIM evo4 data logger with scrutineering channels protocol installed
- Extension cable for data stick
- IR. receiver
- Boost Pressure sensor 0 – 3 bar
- Connection of the boost sensor to the engine manifold
- Holder kit for the logger
- Installed on the car (if the customer order only in new cars)

### Scope of delivery

#### AiM evo4 data logger

- Connection cable CAN, 1.5 m
- Connection cable 12V, 1.5 m
- GPS antenna, 4.0 m

#### Extension cable for data stick

- 1.5 m

#### IR-receiver 711, long

- Lap signal master beacon

#### Pressure sensor 0-3 bar

- Boost pressure sensor

#### Holder kit for data logger

- Screws, holder pressure sensor,...



1 Data logger AiM evo4

2 GPS antenna

3 IR - receiver

4 Connection cable CAN

5 Extension cable Memory Key

6 Connection cable 12V

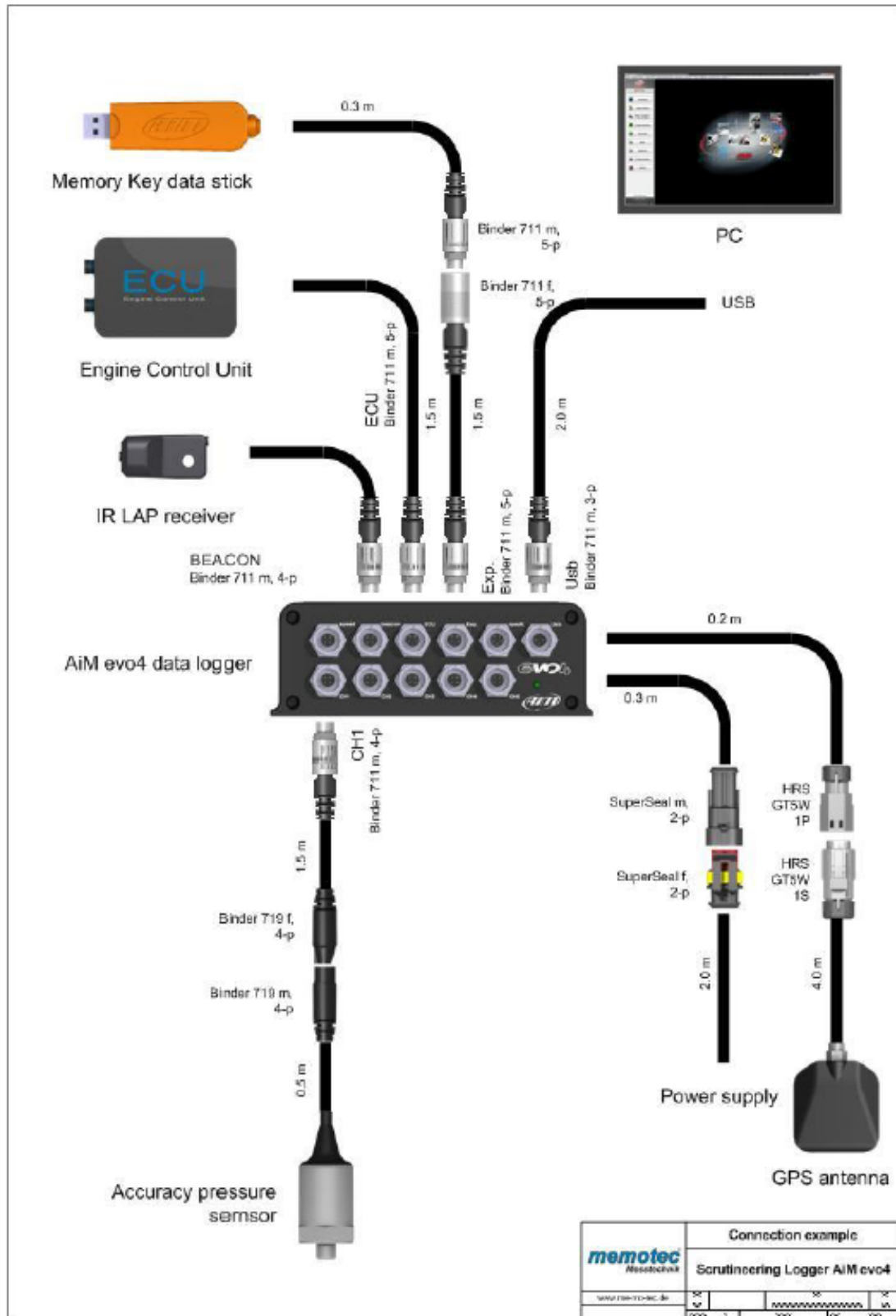
7 Boost pressure sensor

8 Holder

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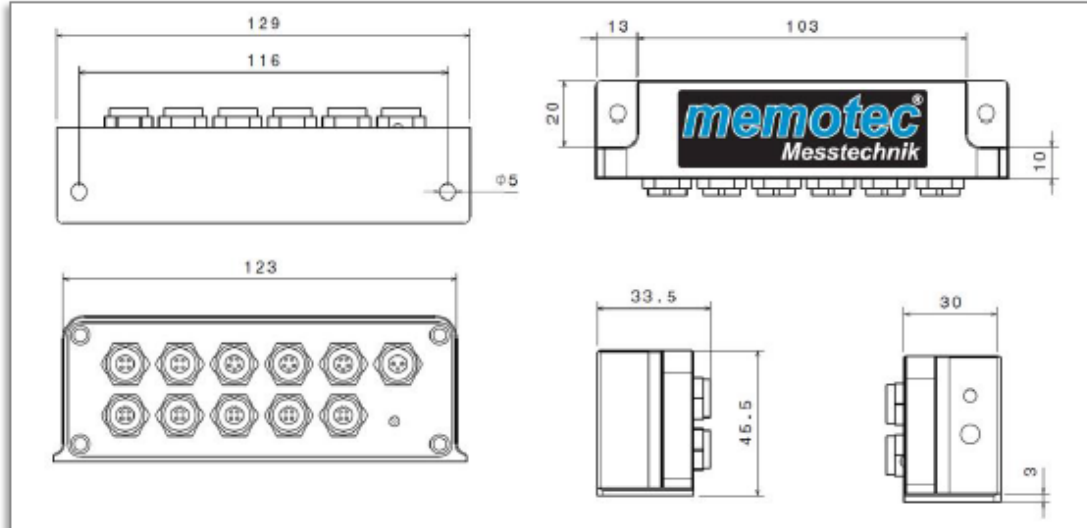
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### Connection example



### Mounting of the data logger AiM evo4

AiM evo4 data logger has to be placed on the passenger side of the car with its connectors looking to the door and its memotec sticker looking to the sky.



The GPS antenna must be placed outside on the roof and its memotec sticker looks to the sky. No other GPS or radio antenna has to be present within 0.5 m circumference.

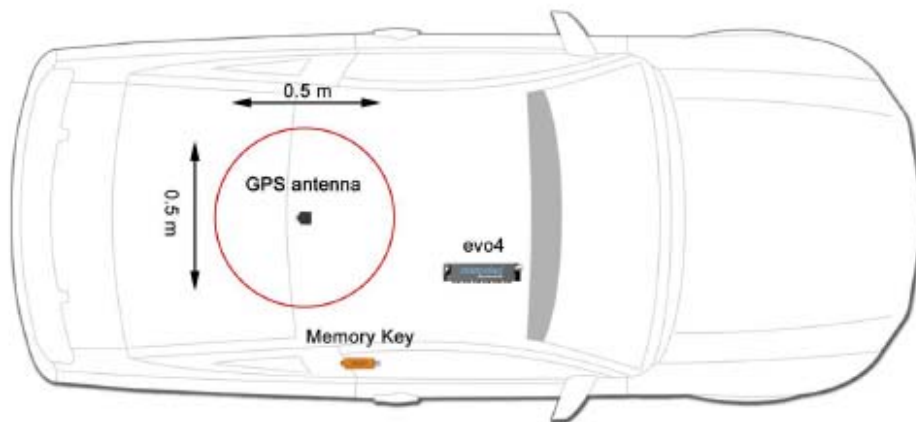


To guarantee a quick change of the memorykey during a pit stop it must be reached easily. Therefore the extension cable (connected to the logger) has to be placed on the passenger side.



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### Electric connection of the data logger AiM ev4

The logger has a 12V connection cable which is provided with a two-pin plug, type AMP Super Seal. The counter cable M22Z12V, 1 m long, 2 x 0,35 mm<sup>2</sup> sections, is also included in delivery of the logger. The black cable must be connected to earth, the red one to 8 - 16 V DC behind the main switch, terminal 30, secured with 1A. This cable may be freely shortened or extended.



### Data transfer via CAN-Bus

The 2m long, double core connection cable with five pin screw plug M22ZCAN must be used for the connection to the CAN bus. This cable may be shortened till the 120 Ohm point (attention: then you will have other cable colours) but **not extended**. The white pipe must be connected with CAN high, the light blue with CAN low to the engine control, and the screw plug must be fitted to the ECU socket and be tightened manually.

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### Boost pressure via sensor

Boost pressure: Is picked up through sensor M20Z911. Measuring range 3 bar abs., resolution 0.0007 bar. It must be **not** mounted directly into the manifold but connected by a tube and fixed to the chassis (free of vibration and heat).

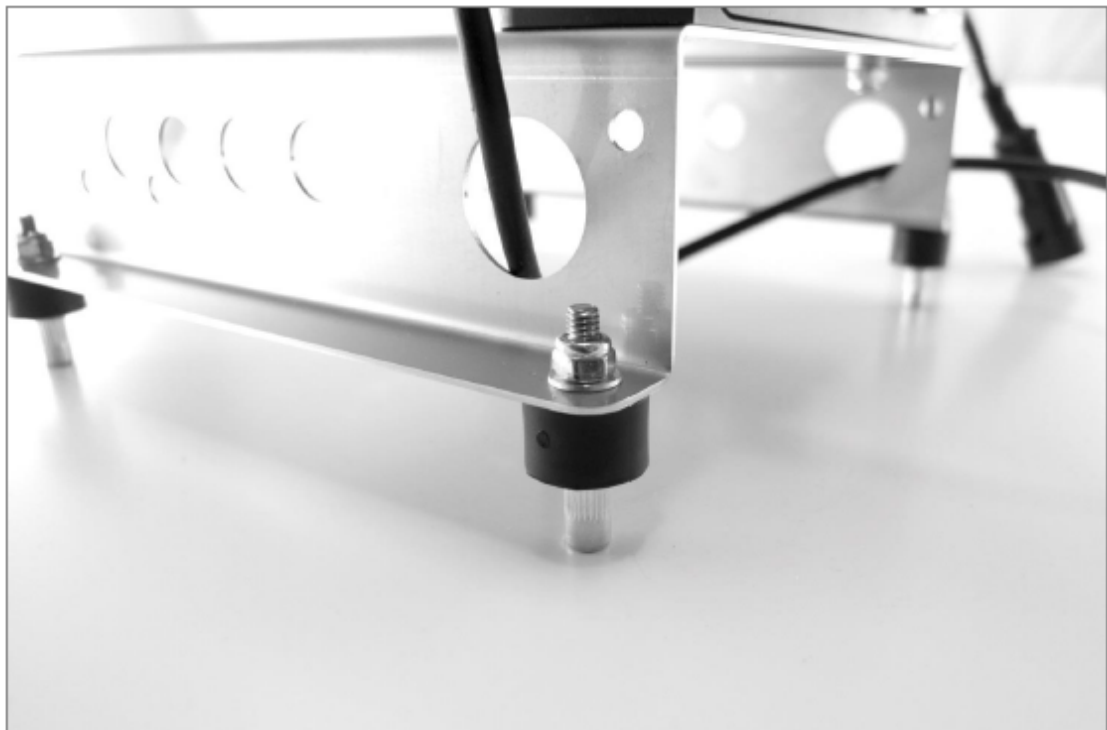
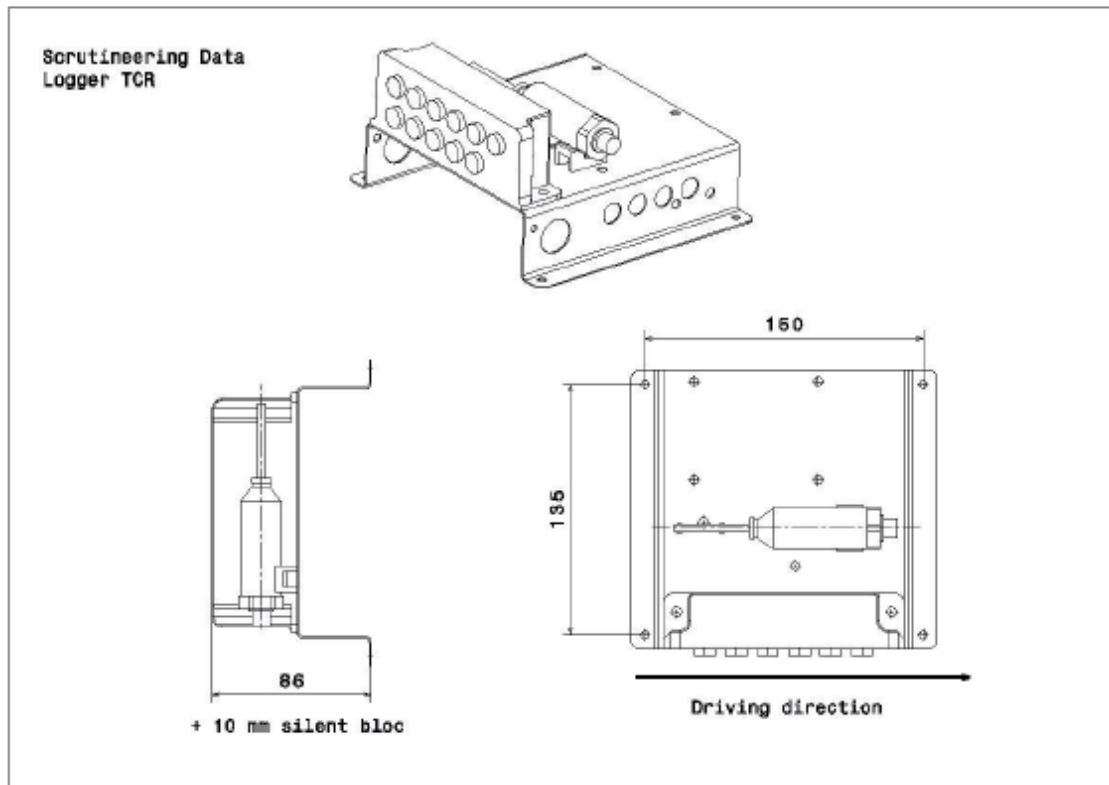


### Data storage

To guarantee a quick change of the memorykey during a pit stop it must be reached easily. Therefore it should be fixed with soft Velcro at the roll bar/B-mount (passenger door).



### Holder for Data Logger



### Channels to be logged

Channels	Channel name	Sampling rate	Measure unit	Low scale	High scale	Notice
RPM	RPM	50 Hz	rpm	0	10000	
Speed	Speed_FR Speed_FL Speed_RR Speed_RL	50 Hz	Km/h .1	0	300	failing that, of one front wheel and one rear wheel
Throttle Position	TPS PPS	50 Hz	%.1	0	400	All sensors if more signals available
Engine load	...	50 Hz	%.1	0	400	position of the throttle valve or of any other control element
Water Temperature	Water_temp	1 Hz	°C	0	120	
Boost pressure	Boost_press	10 Hz	Mbar	500	1500	
Barometric pressure	Baro_press	10 Hz	Mbar	500	1500	
MAP pressure	MAP_sens MAP_press	10 Hz	Mbar	500	1500	1 per Airbox
Brake pressure	Brake_press_f	25 Hz	bar	0	200	
Lambda	Lambda	50 Hz	Lambda	0	2	
Ignition angle timing	Igni_angle	50 Hz	sec			

*\*SEAT Sport supplies the logger with the right CAN protocols installed.*

#### How to order:

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