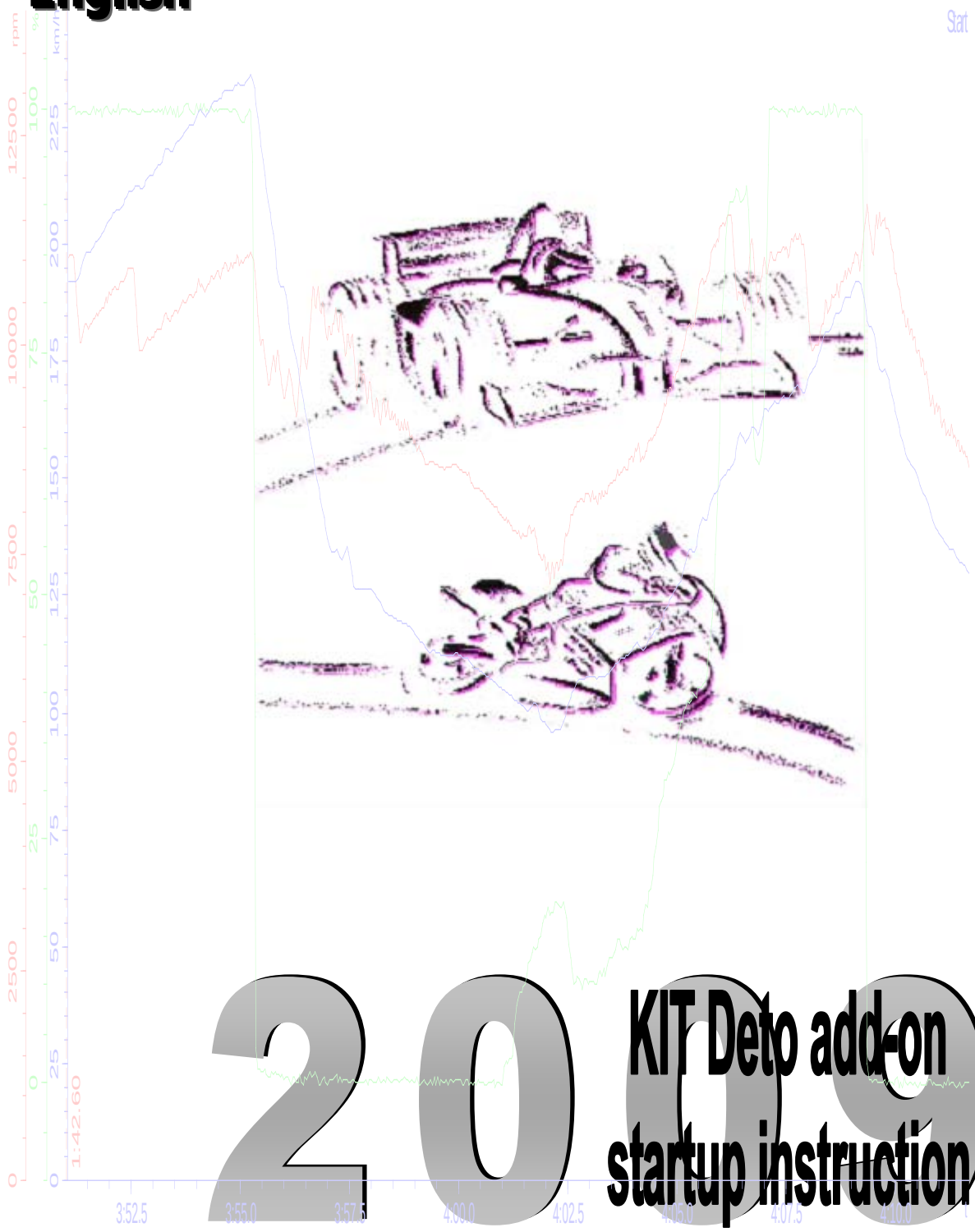
2D KIT System
www.2d-kit-system.com

- English -



2009 KIT Deto add-on startup instruction

Art.No.: AC-DOC_SY-KIT-Deto-addon_08-000 modified 01.04.2009

Table of content

Preface

This documentation contains the necessary information to setup and to work with the 2D kit system.

In order to achieve the optimum result when working with the 2D-Kit System, we recommend to read the instructions carefully and follow them step by step.

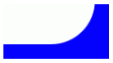
Symbols used in the text

In the paragraphs highlighted with this symbol, you will find tips and practical advice to work with the 2D-Kit System.

In the paragraphs highlighted with this symbol, you will find additional information and it is very important that you follow the instructions given.

Documentation reference
⇨ The user get an unique item number for an user manual to find further assistance

Additional information about manuals, datasheets, software updates or new calculation files can be downloaded from our homepage. The specific download area for the Kit system can be found at: http://www.2d-kit-system.com (=>See Downloads)



Basic Kit

Sensor options

A/F (lambda) add-on Kit (4-stroke) with 1CH or 2CH

Deto add-on Kit (2-stroke)

Possible Updates

Kit software user manual (delivered with the CD: SW-CD RaceKIT)

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1. Basic information of all modules and their features

SY-KITDTP-000: Deto add-on kit:
Useful for engine and carburetor set-up for one cylinder. Perfect to compare performance of several cylinders. The Pmax signal is measured for every engine cycle. Detonation information is calculated by the level and length of the detonation.
This module also includes an adjustable open collector output channel to run a LED e.g. (adjustments can only be made in “full user interface”-mode of WinIt). Purpose is to visually indicate detonations.

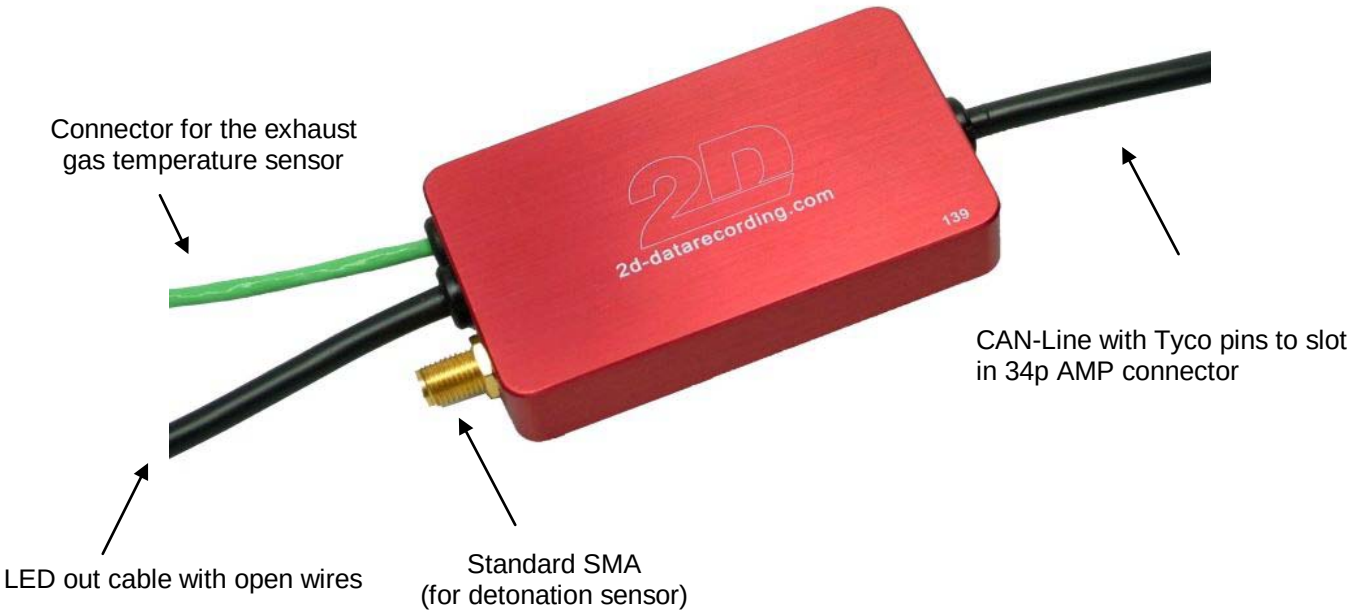
2. The Deto add-on kit

The Deto add-on kit consists of the Deto interface box, one detonation sensor and one exhaust temperature sensor.

2.1 Mounting the Deto module

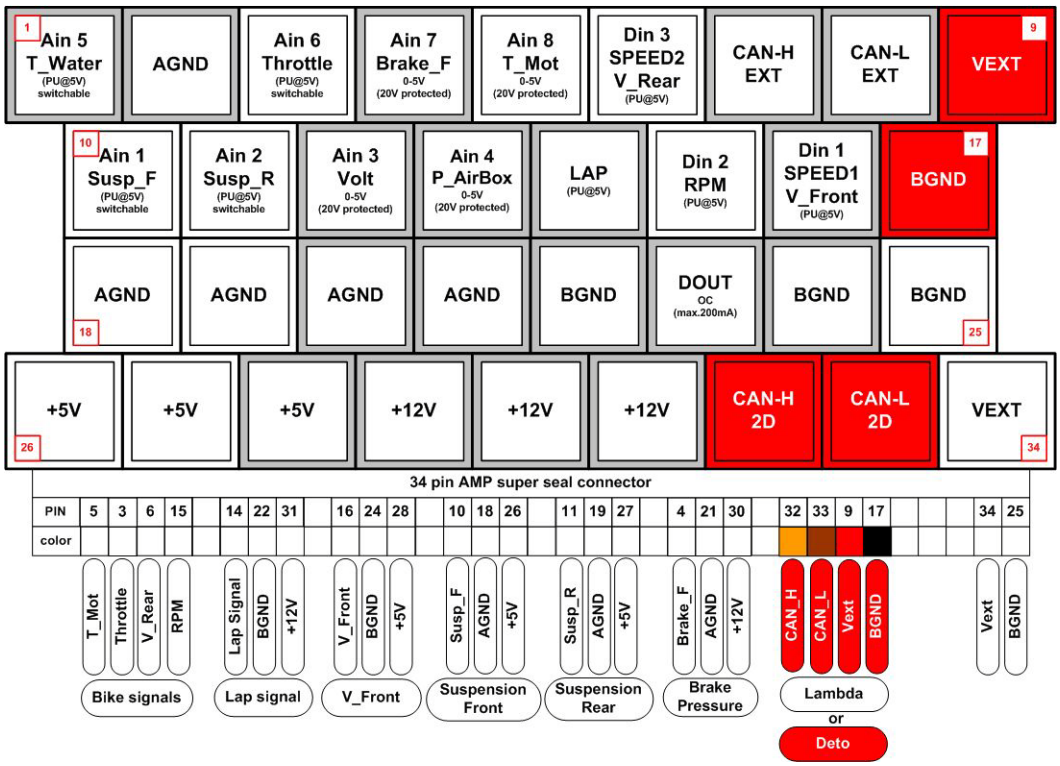
There is no special mounting position for the Deto interface box. The mounting position is only limited by the cable length of the Deto module. The Deto module must be connected with the Kit-Logger, therefore we recommend to mount the Deto add-on kit near by the logger.
To mount the exhaust temperature sensor it is necessary to weld an M5 nut onto and to drill a hole through the manifold.

The detonation sensor is mounted between spark plug and combustion chamber. Therefore it is necessary to use spark plugs with longer thread or to modify the combustion chamber. Anyway you have to take off the seal ring of the spark plug. Please be sure that the cable exit does not touch the combustion chamber and/or the water hood.

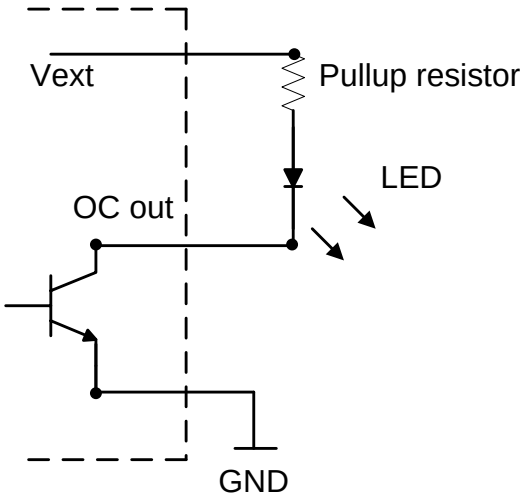


2.2 Connecting the Deto module

The wires of the Deto module are delivered from 2D with the “Tyco contact pins” already crimped. Just insert the individual contacts into the 34pin AMP connector. The following table gives you the correct positions for the pins.



Technical information	Interface unit (34pin AMP connector)
Cable length:	690mm
Crimp contacts:	“Tyco crimp contacts”
CAN_H (orange)	**Pin 32**
CAN_L (brown)	**Pin 33**
Vext (red)	**Pin 9**
BGND (black)	**Pin 17**



This module is equipped with an open collector output. This enables you to connect an electrical load such as an LED. Sink current for this output channel is 250mA.

Please be sure to insert a pullup resistor when using a LED.

Technical information	LED out
Cable length	240mm open wires
Vext (red)	Power out
GND (black)	Ground
OC out (brown)	Open collector output