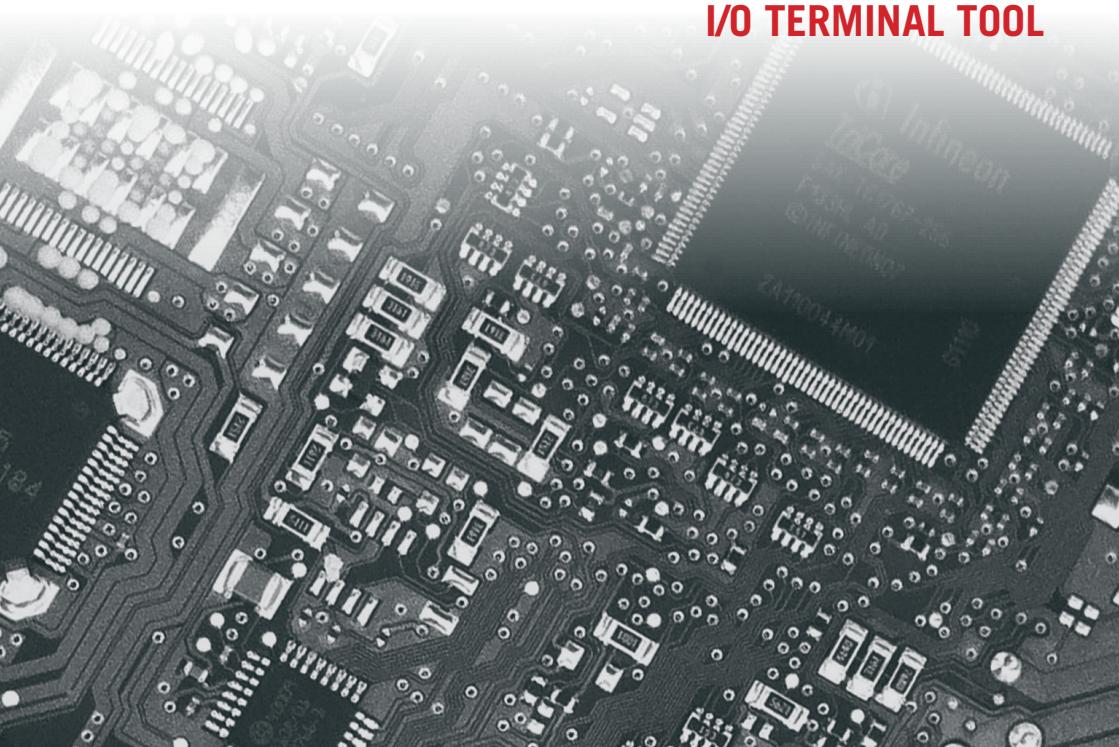


USER MANUAL

I/O TERMINAL TOOL



Sedox Performance AS

Knud Holms gate 1

4005 Stavanger

Norway

tel.: +47 90 91 65 85

email: sales@sedox.com

www.tuningfiles.com



1. Introduction

The I/O Terminal tool can offer functions that normally would normally require the ECU to be opened and a programmer connected, however it can accomplish these procedures without opening the ECU and in some cases all from OBD.

Using this tool you gain full control of the ECU's memories. You can read/write eeprom and internal/external flash memories (where available) All operations are done over K-line or CAN bus without need to open ECU.

To begin using the tool, you will need to download the software. The current release can be found at <http://www.tuningfiles.com/i-o-terminal-tool-kit.html> at the bottom of the page under attachments.

2. Software Licenses and Activations.

Software licenses are held on security SIM cards.



You can access the SIM card by pressing the yellow button on the side of your device, which will release the SIM card tray.

Bosch, Siemens and Denso licenses must be held on their own individual SIM cards.

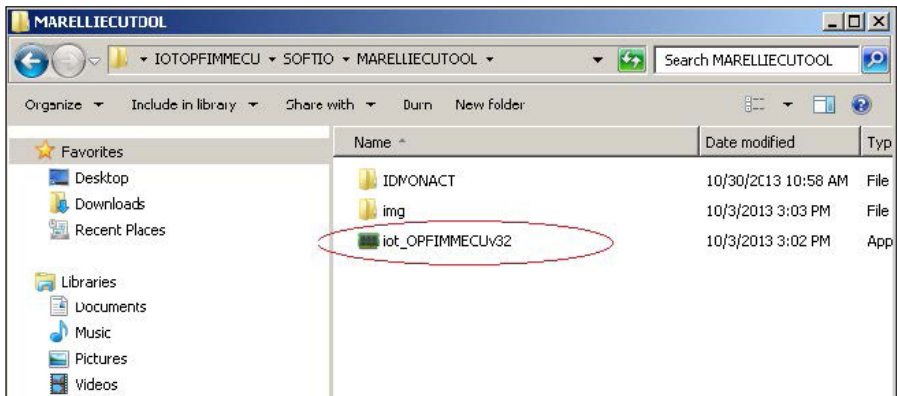
Marelli and Easytronic can be either added to a Siemens SIM card in the form of a activation file, or can be supplied on a separate card.

You must insert the corresponding SIM card when opening one of the I/O Terminal Tool software programs.

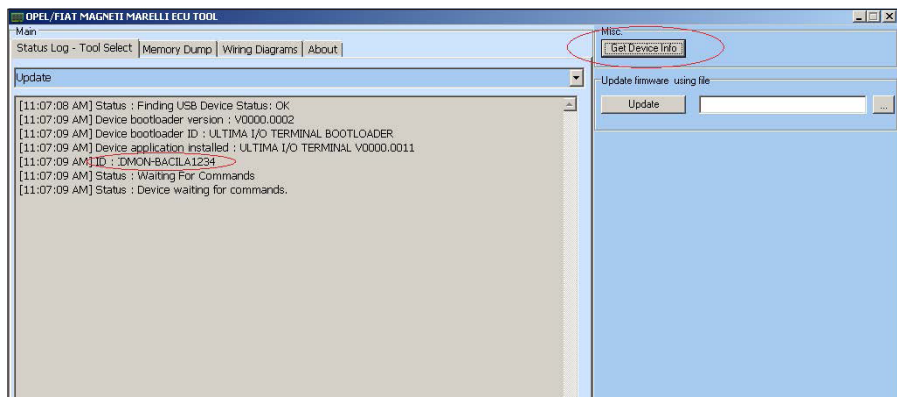
Adding new licenses via activation file

Here is a short description of how to add extra activations to an existing SIM card. First you must read your unit ID:

1. Launch Marelli/Easytronic ECU tool software.



2. Select “Update” and then click on “Get Device Info” button.
In log window you will see your unit ID.



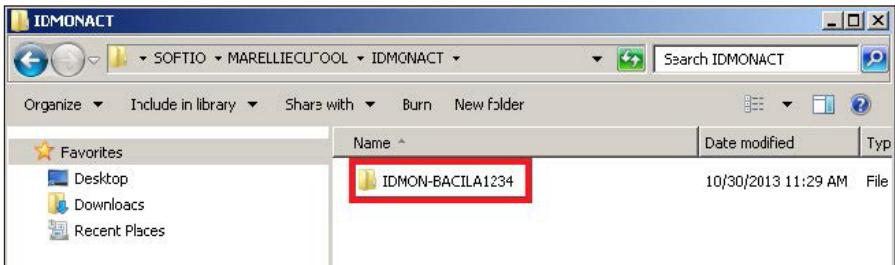
Send the ID to support@sedox.com and request your desired activation. We will return you a file. Follow the instructions below to activate your new software licenses.

Marelli/Easytronic ECU TOOL folder structure overview

Here you can see ecu tool folder structure. "IDMONACT" and "img" folders must be in same folder as Marelli/Easytronic ecu tool software.



In "IDMONACT" folder you must have folder with your current I/O TERMINAL unit ID.
In this folder all your activations are placed.



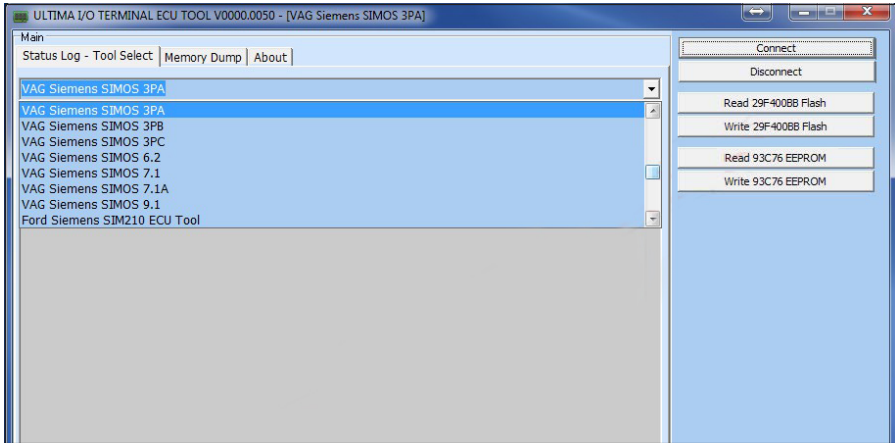
If the software does not see the activation file it shows an error.

Error : IDMON File

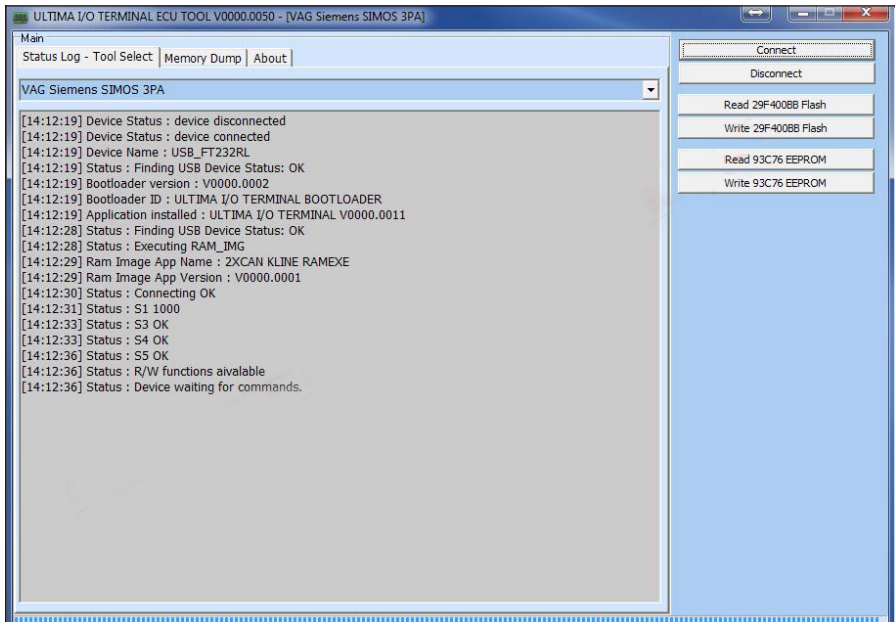
C:\Users\USername\Desktop\IOTOPFIMMECU\SOFTIO\MARELLIECUTOOL\IDMONACT\ID MON-
IDMON-BACILA1234\OPELECU.bin does not exist

3. Reading ECU Memories

Select the desired ECU type from the drop down list:



Now you can establish communications with the ECU using the “Connect” or “Enter Superv. Mode” button. The tool will start communicating with the controller and pass security to gain access to the memories as shown below:



Once you are connected to the ECU, you can proceed to read/write the available memories.

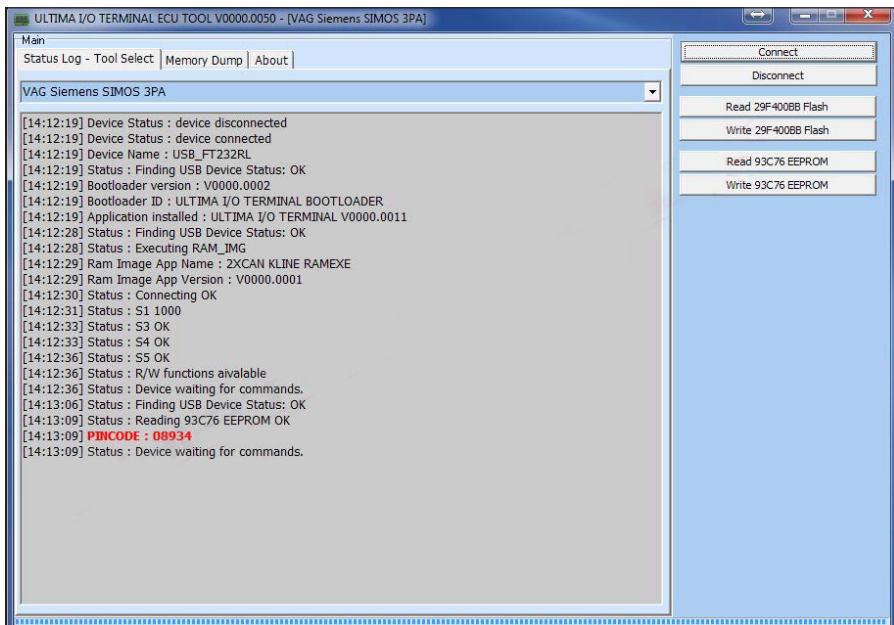
We recommend that you read and save a backup of all memories before making any changes!

Press the “read” button for the desired memory and the software will begin reading the data. Once complete it will alert you in the dialogue window.

In the image below we have read the eeprom memory and you can see that the software reports to us once the process is complete “Reading 93C76 EEPROM OK”. Also there is a progress bar at the bottom of the window which indicates the status of the reading operation.

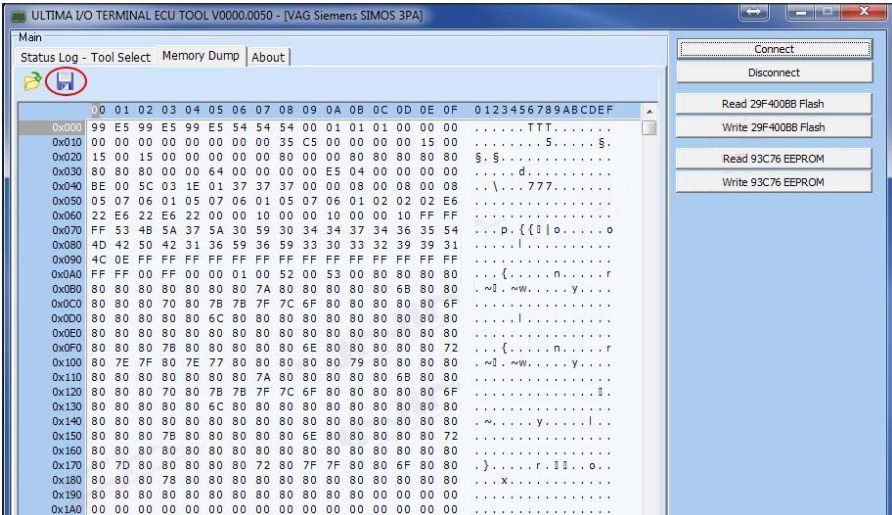
Please note, on this ECU, the software has also automatically identified the immobiliser PIN code once it has read and parsed the eeprom data.

Where available, the software will also offer other immobiliser, VIN and mileage functions after the reading of memory containing this info is completed.

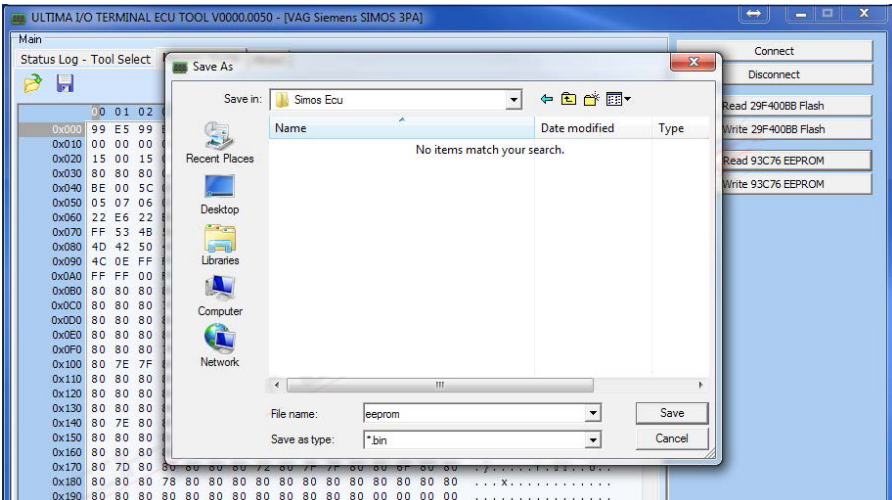


Now the reading operation is complete this file is loaded into the buffer.

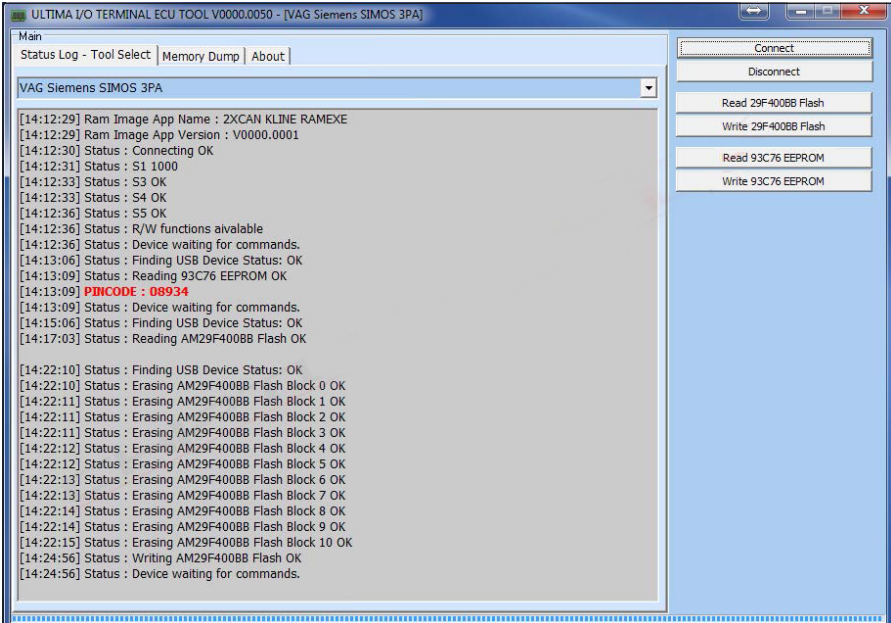
To view and save the file, you need to select the “Memory Dump” tab. You will be able to see the read file in this window. To save the file, click the save icon as highlighted in the image below and save a copy of the data.



Choose the folder to save the file and proceed to save. Then repeat these steps for each memory.



Once you have finished reading all desired memories press the “Disconnect” or “Exit Superv. Mode” button.



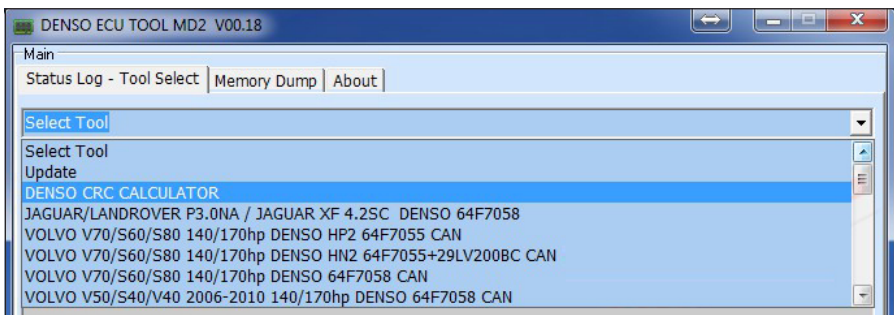
Once you have finished writing all desired memories press the “Disconnect” or “Exit Superv. Mode” button.

5. Checksum Tool

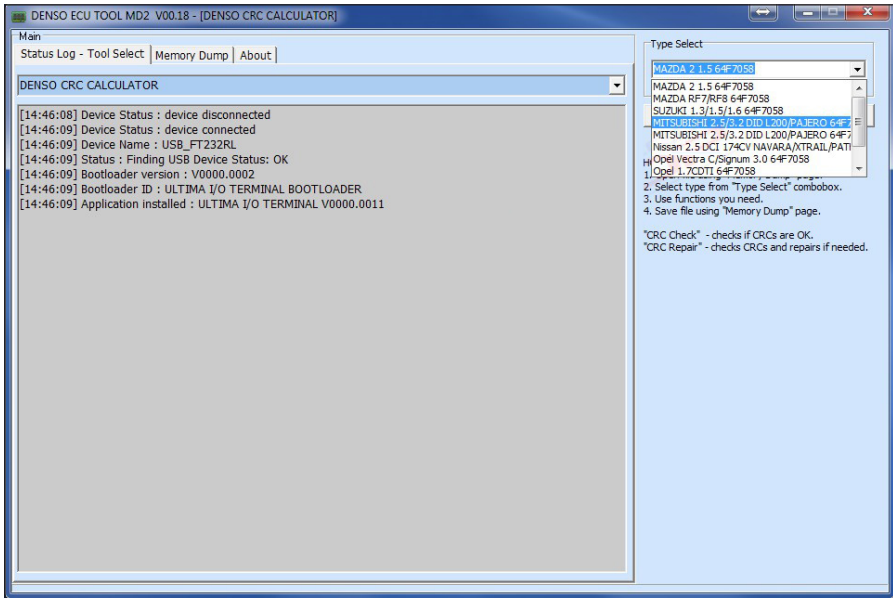
In the Denso software, there is a tool for correct checksums in the flash memory.

To use this tool, you need to load the file to be repaired into the buffer as described in the previous operation.

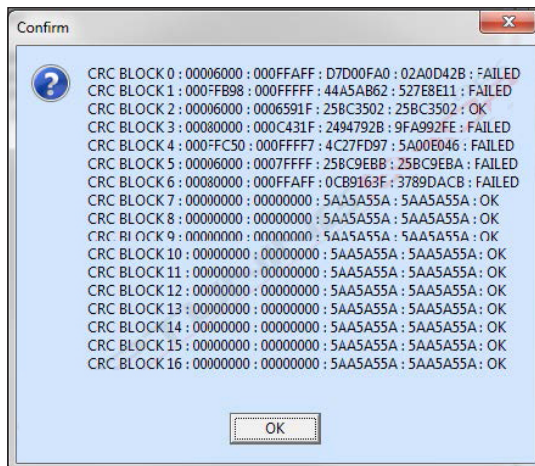
Then select the “DENSO CRC CALCULATOR” tool from the main menu.



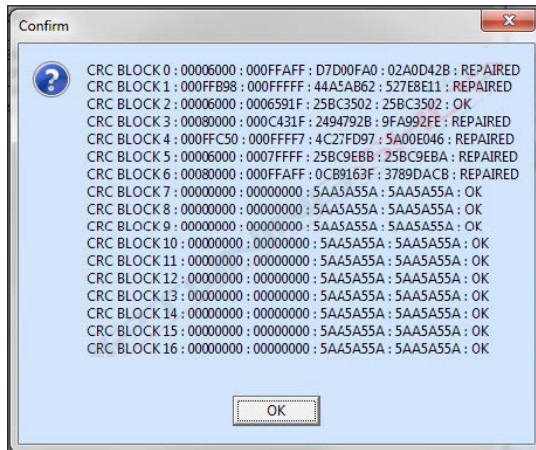
Select the ECU type from the drop down menu of the CRC tool.



Now press the "CRC Check" button, and the software will check and report on the status of each checksum block in the file.



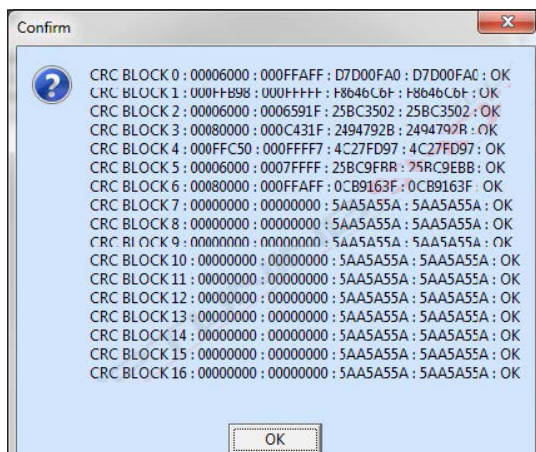
If you see “FAILED” in any block then you need to repair these checksums, proceed by pressing the “CRC Repair” button and then a new report is displayed:



The software attempts to repair the bad checksums, **however you must verify that they are all fixed by pressing the “CRC Check” button again**. If some blocks still display “FAILED” you must repeat the CRC repair process.

The checksum blocks must be calculated in a certain order, so sometimes it is necessary to carry out the repair function more than once to fix all bad sections.

Once all blocks show as OK the checksums have been repaired successfully, it will show you a window like the one below. You can now save the updated file, and then load this new file into the buffer when you are ready to write to the ECU.





Sedox Performance AS

Knud Holms Gate 1
4005 Stavanger
Norway
tel.: +47 90 91 65 85
email: contact@sedox.com

www.tuningfiles.com

Technical alterations reserved!

Copyright by Sedox Performance AS and our respective partners!

This product should be operated by competent personnel only.
Sedox Performance AS do not accept any responsibility for damages,
direct or consequential caused by improper handling.