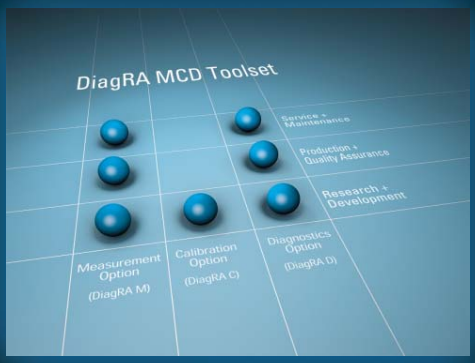
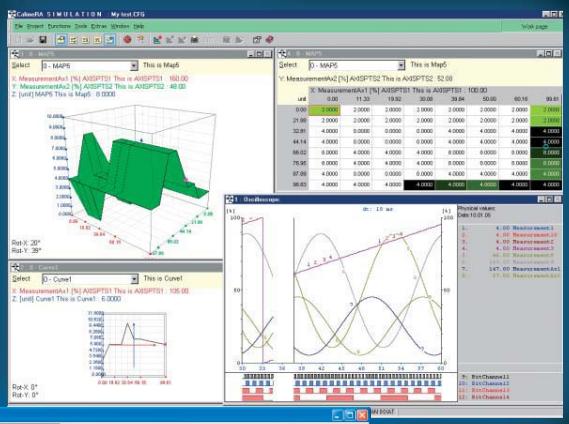
New

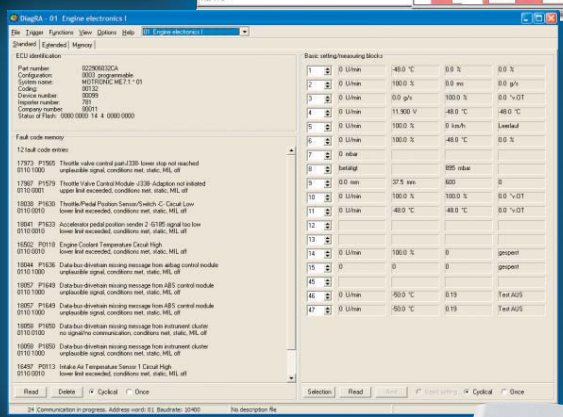
DiagRA MCD Toolset

Measurement - Calibration - Diagnostics

Simple licence model, low entrance - top upgrading, fair prices







The features

- Top tools in an integrated package
- Support of CAN, K-Line and SMB
- Various platforms
- Mobile, easy to use
- Minimum hardware requirements
- Standards: CCP, MCD-2, ODX, CANdb, MDF, DCM

DiagRA M

- Powerful measurement
- Measurement data acquisition from ECUs and devices on CAN and SMB
- Online measurement and visualisation
- Offline processing of data

DiagRA C

- Mobile ECU calibration
- Graphical and tabular display of characteristic curves and fields
- Ergonomic characteristic field editor
- Editor for structured parameter adjustment of the fault path manager

DiagRA D

- ECU diagnostics on CAN and K-Line
- Workshop tester
- Scan-Tool
- Advanced developer functionalities
- Flash programming

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DiagRA MCD Toolset
Measurement · Calibration · Diagnostics

The DiagRA MCD Toolset is an applications and diagnostics tool for working with electronic control units in the automotive industry. It is a combination of the already widespread tools: MescaRA, CalimeRA, Codes and DiagRA. The significant advantage for the user is in particular the common use of the device driver for the interface hardware, for protocols and parsers for the descriptive files in A2L or DBC format. Acquired data can be used across all tools. It is thus possible to graphically display series of measurements from diagnostic measured value blocks for comparison purposes in DiagRA M and to simultaneously calibrate it in the DiagRA C adjustment option. On-line operation can be started and terminated from all three parts of the toolset. Thereby, whenever it is technically possible, the same interface hardware is used. In spite of this, for example if there are several CAN buses, it is still possible to operate several interfaces. The settings necessary for this can be carried out centrally.
During this integration process it was particularly important to ensure that the individual toolset options could run separately. The more than 4000 users of our DiagRA diagnostic tool will be able to find this complete option again in the DiagRA D software. For the upgrade all that's required is a current software maintenance contract. Each of the current users can acquire the other options and add them to his tool, which is already on an operating system, by means of a simple upgrade, provided they are available on the same operating system.

DiagRA M (MescaRA)
Measuring options

With DiagRA M you can acquire and display on-line both graphically and numerically the state variables for a vehicle from control and measuring units. The acquisition is thereby carried out on the CAN and the serial measuring bus (SMB) – also simultaneously. For the definition of the values, that are to be acquired, the CAN DBC files or corresponding A2L files are needed. For the interpretation of the control unit descriptive files the parser is designed according to the ASAM MCD-2-MC specification.
Furthermore values of Scan-Tool Mode1 and measurement value blocks can be acquired by using the diagnostics option DiagRA D, this means to be displayed numerically and graphically and to be recorded.
DiagRA M offers a powerful, flexible, adaptable and storable user interface configuration and can be automated with convenient triggers with conditions which can be combined over several measurement channels. Acquired data can be saved and processed immediately via the integrated evaluation function. DiagRA M supports cold-start measurements and the transmission of CAN messages for specific unit testing.
Data exchange with other applications can take place via MDF Import and Export.
As in the other tools attention has been paid to a particularly simple, intuitive operation and hence a requirement-oriented functional scope has been achieved.

DiagRA C (CalimeRA)
Adjustment option

DiagRA C is a CCP (CAN Calibration Protocol) calibration tool whose functionality and operation is exactly tailor-made to the needs of the applications engineers and control unit developers. The user surface can be parameterized and the configurations can be stored. Hence repeatable and comparable sequences are possible.
Characteristic curves and fields can be displayed both graphically and numerically. The ergonomic characteristic field editor offers a Copy&Paste function and a histogram function in text mode.
With DiagRA C adjustments can be made on-line. The adjustment data can be printed out, compared and mixed. The exchange of adjustment data by DCM is supported.
Particularly worth mentioning is the option of doing without assimilation of the electronic control unit with an emulator for application tasks. CCP support can be achieved with simple and cheap CAN interfaces, so that a large part of the tasks of applications engineers can be achieved with little cost expenditure. In particular it is possible to set up a complex application environment in interaction with the other options in the DiagRA MCD Toolset.
The standard RA software Codes for the processing of control unit data have already been integrated into DiagRA C. The DiagRA C option thus offers a clearly-laid-out editor for the structured paramaterizing of the error-path managers from different control unit manufacturers.

DiagRA D (DiagRA)
Diagnostics option

Already well-known on the market for several years, DiagRA D offers developers the three essential components of Scan-Tool, workshop tester and expanded functions. With the expanded functions, this simple-to-operate tool permits the developer to fully read out the error memories of control units via the descriptions from A2L files.
All 9 modes are supported in Scan-Tool-Mode according to ISO 9141-2, ISO 14230-4 and ISO 15765-4.
DiagRA D can also be used as a tester substitute.
DiagRA D supports various Keyword protocols on K-Line, CAN and ISO-CAN as well as GMLAN and Volvo D2 (on CAN) and is therefore suitable for different vehicle types. Diagnostic descriptions according to the ODX specification will be supported shortly.
Data can be triggered by hand using preconfigured measurements or acquired as a recording and further used. The data can also be saved in structured XML format. This structured storage option permits the uncomplicated reading into a database or other applications for data evaluation.
There are automation options via DDE and ASAP-3 interfaces for connecting to a test stand.
CAN messages can be acquired and transmitted. For this purpose the user only requires the DBC descriptive files.
A flash option for flash programming below KWP2000 (CAN TP2.0) is also available.
Based on a Open-Source(GPL)-DOS tool a Windows surface for doing the testings of the SAE J1699-3 OBDII Compliance Test Cases is implemented in DiagRA D.

Our software products are in use amongst others at the car manufacturers Audi, BMW, DaimlerChrysler, Ferrari, Fiat, Ford, Lamborghini, Opel, The Volkswagen Group and their suppliers.

Note: The use of the DiagRA MCD Toolset is only possible with special software licence keys that are available at RA Consulting. Several program parts like the workshop tester, the expanded functions and the flash programming option will be only delivered to user groups defined by RA Consulting.
Because the J1699-3 function is based on an Open-Source-Tool we cannot guarantee the permanent provision. We try for support and adaption as long as it is economically justifiable and technically reasonable.

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October 19th, 2005