

SYSMA

Vehicle Tuning & Configuration Tool

Description

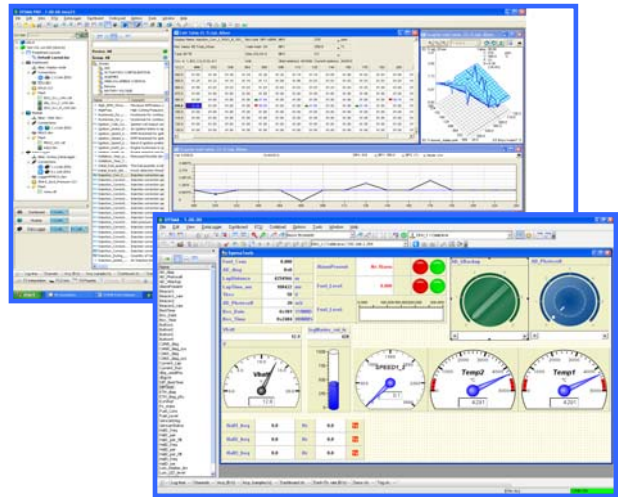
SYSMA is the new Magneti Marelli integrated tool designed for configuring and tuning vehicle control systems for the most advanced levels of motorsport.

SYSMA manages all the configurations files, analyses the measured data and reprograms the Hardware devices also flashing the embedded firmware

SYSMA allows to compare and merge data versions, importing data between different firmware releases.

SYSMA is a flexible software designed to be opened of the universal standard automotive platforms (ASAM), in order to ease of exchange data between electronic and software suppliers.

SYSMA supports an open architecture in order to permit integration with custom additional software tools. Public services are provided so that other applications can use SYSMA functions to fully control the system



Main Features

- Advanced interactive Graphic User Interfaces
- Projects management
- Data Logger Setup, ECU Calibration and Dashboard Editor
- Integrated programming tool for flashing firmware
- Simultaneous monitoring and recording of measurement from ECU and Data Logger
- Save measurement in WinTAX4 data format
- Integrated Math Channels Editor
- System database managements for calibrations and measurement
- Compare and Merge of data versions, importing data between different firmware releases.
- User Level Access management
- Support of Ethernet, CAN and Bluetooth lines
- Compatibility with standard common used CAN Card (Vector, Peak, CanDo)
- External potentiometer management (Desk AMC6 / AMC4)
- Support of standard DBC database format (Communication Database for CAN)
- Complete Customisation: layouts, graphs, math libraries, colours schemes to suit user preferences

Benefits

- Compatibility with ASAM standards: MCD-3 (test bench interface), MCD-2 MC (ECU description for measurement and calibration system)
- SYSMA in addition to standards implements data formats and protocols dedicated for the Motorsport world and its needs of performances and reliabilities.
- Support of Standard CAN signals (advanced graphic editor for CAN messages)
- OLE/Automation inter-process communication protocol supported
- Interfaced to third party data systems via dedicated APIs
- Open to standard tools: e.g. Excel®, Matlab® and Simulink®
- Extensive contextual HELP

System Compatibility

- Compatible with: Windows® XP 32/64 bit, Windows® Vista 32/64 bit, Windows® 7 32/64 bit, Windows® 8 32/64 bit
- Compatible with Dual & Quad Core processor

Typical Applications

In all applications with Magneti Marelli proprietary protocol on board

SYSMA

Vehicle Tuning & Configuration Tool

Main characteristics

Setup

The main screen area of SYSMA contains graphic or alphanumeric analysis windows in which logged data may be represented in a variety of different ways. You may save commonly-used combinations of analysis windows as Layouts, which allow the waveforms to be organised into logical screen containers. User-configurable accelerator keys make SYSMA easy to use

Projects Management

All the system files (ECUs calibration database, Data Logger Tables, firmware, settings...) are included in "projects" files. This means simplicity and reliability of management for data versions

Data Logger Setup and Monitoring

Sysma integrates all functionalities of logging setup. In a very easy way it allows you to be connected to the Data Logger and to generate and read the measurements logging table.

ECU Measurement and Calibration Management

Sysma integrates all functionalities for ECU Measurements and Calibrations management such as real time display of measurement Parameters, editing, including 2D and 3D maps

Dashboard Editor

Sysma integrates all functionalities for Dashboard Setup: graphical Dashboards setup, libraries for Bitmap, Font and layouts.



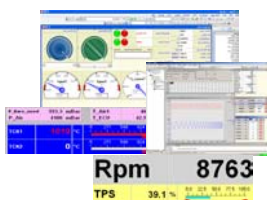
Firmware CodeLoad

Sysma integrates all functionalities for programming all system devices: ECU, Data Logger, Dashboard and Modules. Automatic project update with new firmware is also supported.

Instruments

The overall appearance of instruments is fully configurable to suit your preferences or to adjust the display to the different brightness scenarios (garage, outdoor etc.)

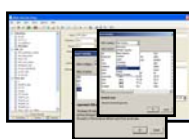
A large variety of styles allows you to customize the instruments appearance and to adapt them in to SYSMA's layouts.



Maths channels

Virtual channels are generated from user-defined functions of measurements.

A graphical editor, with advanced features, allows complex math expressions to be built up quickly.

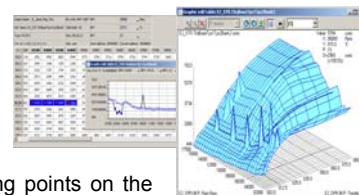


For further information, please contact:

Calibrations Tuning

Sysma provides a large amount of functionalities which allow editing and managing of the calibration for all system devices:

- Change values by dragging points on the graph or editing cells
- Export/Import calibration values from Excel
- Mapping, Work Point, read calibration data from the ECU



Read/Write

This special display allows the administrator to r/w any software variable allocated in the unprotected regions of ECU memory.

Desk Potentiometer support

Sysma support external potentiometers (Desk AMC6 / AMC4) where you can modify operating parameters values in faster way through the rotary dials, instead of using the PC keyboard.

Mapping Function

The SYSMA Mapping function lets you directly write correction's values to the maps contained in the ECU.

Asap3 protocol support

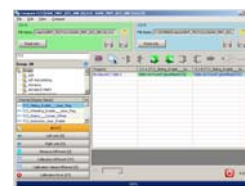
Sysma support bidirectional Asap3 protocol allowing communication with commonly used dynamometric benches

Compare & Merge

Sysma implements an enhanced integrated compare tool. It allows to compare calibrations & measurements sets as well as the logging tables.

All results are clearly displayed in a report where you can also copy values from compared sets.

The merge utility is dedicated to update user projects to the newer software embedded projects.



OLE Automation

SYSMA provides powerful possibilities for interfacing with external applications using the Automation Server technology in this way SYSMA can be run and controlled by any program which has the characteristics of Automation controller such as Microsoft Excel®, Matlab®, Simulink®

SYSMA APIs

The APIs layer allows 3rd party applications to read and write SYSMA measurement and calibrations database

Minimum PC requirements

- Processor: 1 gigahertz (GHz), recommended 4GHz or faster
- RAM: 1 gigabyte (GB) , recommended 4GB or greater
- Hard disk space: at least 2GB free
- Ethernet TCP/IP network interface 10/100/1000 Mbit/s



Magneti Marelli S.p.A.
Motorsport
Viale Aldo Borletti, 61/63
20011 Corbetta (Milano) Italy

Tel. +39 02 972 27 478
Fax +39 02 972 27 570
sales@magnetimarelli.com
http://www.magnetimarelli.com

January 2013
rel. 01
page 2 of 2