

## High-Performance, Low Price and Global Standards Modal Analysis Software produced by F-MAC

### OVERVIEW

In order to secure an accuracy from Experimental Modal Analysis (EMA), it is necessary to acquire precise Frequency Response Function and high-accurate curve-fit algorithm. Also acquiring accurate Frequency Response Function needs high quality data acquisition devices with high quality accelerometers. F-MAC is pleased to provide state of the art technology with all-in-one system which will be able to minimize the calculation error between operators and shortening entire measurement, analysis time. Software has not only classical EMA but also Operational Modal Analysis (OMA) and Order Tracking Analysis. There are features such as Geometry Definition, Perform Measurement, Curve Fitting, Post Processing, Structural Modification and Reporting tools. Depends on application, user can select the number of channels and data acquisition equipment, output from the existing FFT analyzer can be also available. Any time & frequency data can be imported by neutral format such as ASCII, CSV or universal format.

### HARDWARE SYSTEM CONFIGURATION (Accelerometers and Data Acquisition Devices)

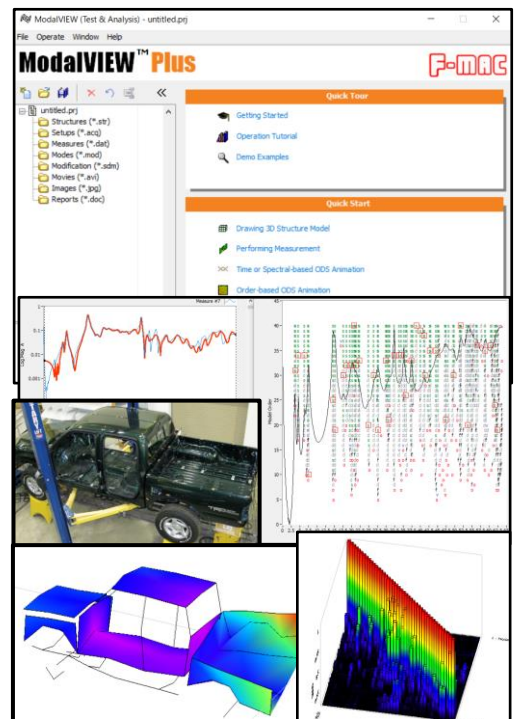


### Software Features (ModalVIEW Plus) List

- 3D geometry definition (Direct, import from ASCII/CSV/Univ)
- Direct plug-in control NI DAQ with USB connection
- Various drive signals for FRF measurement by shakers
- Time / Frequency / FRF Measurement and edit function
- EMA / OMA / OTA / ODS, selectable analysis technique
- Various curve-fit algorithm (SDOF, time/frequency MDOF)
- Classical SDOF (Move response, Peak picking, Circle fit)
- Auto / Manual pole selection from the Stability Diagram
- Intensive Real Mode algorithm curve fit technique
- Curve fit algorithm with/without residual term and Synthesis
- Display max mode shape value in each resonance frequencies
- Rigid Mode Enhancement from Time / Frequency data
- Inertia Property calculation from wire-frame, 6-dof rigid mode
- Variety of post processing features, mode animation etc.
- Modal Parameter Validation function (MAC, Complexity etc.)

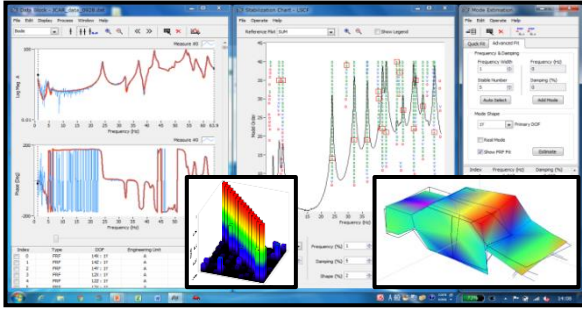
### Software License Feature

- Permanent License with maintenance free policy
- License is provided by Dongle Key, independent Computer-ID
- Necessary software upgrade with free of charge

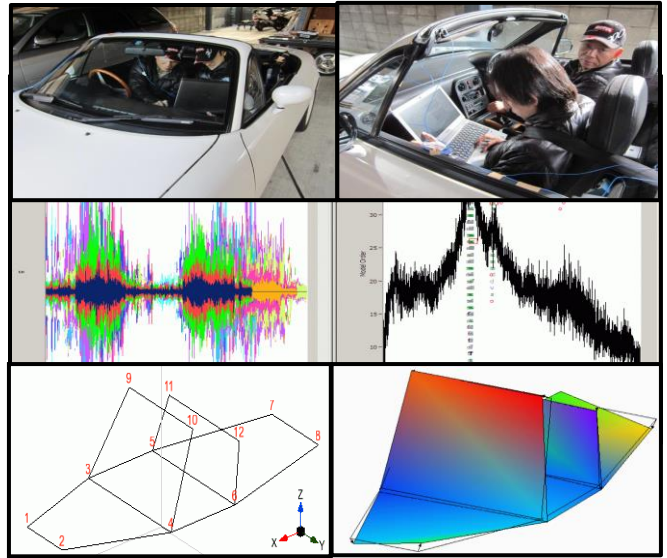


# Application Case from ModalVIEW Users

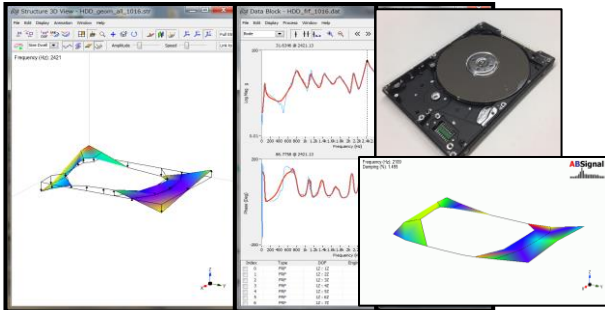
## EMA form Body in White



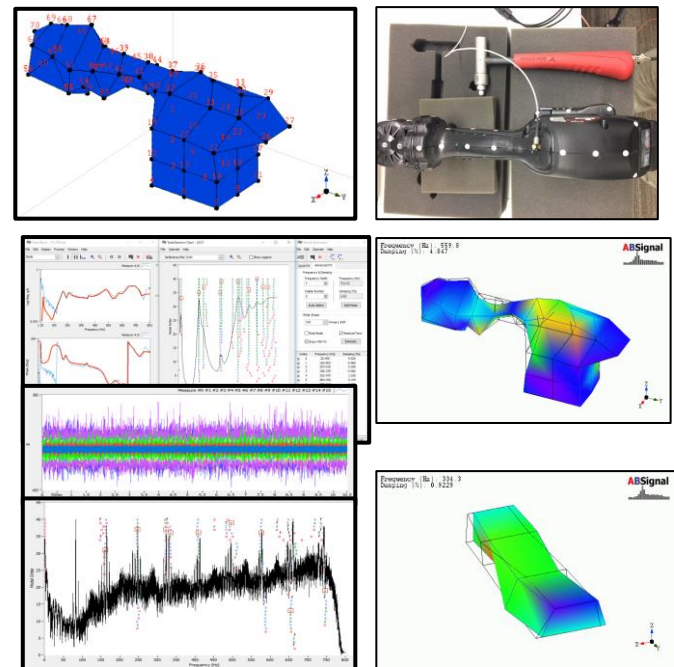
## Skuttle Shake by OMA from convertible car



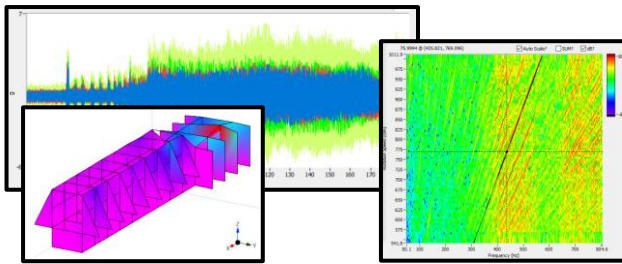
## EMA of Hard Disk in the Laptop PC



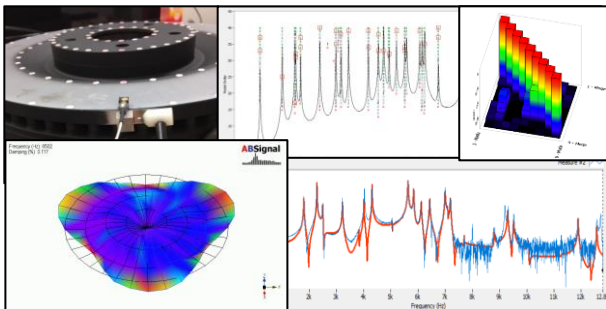
## EMA & OMA from handy reciprocate saw



## Order Based ODS Animation from run-up data



## Inside Surface EMA from Brake Disk



**ModalVIEW™ Plus** Developed By

**F-MA Consulting Limited**

522 Iwakura Chuzajicho Sakyo-ku, Kyoto-City, Japan, 606-0021

Phone: +81-75-791-8145 FAX: +81-75-320-2914

Website: [www.f-mac.com](http://www.f-mac.com)

Mail: [takei@f-mac.com](mailto:takei@f-mac.com)

