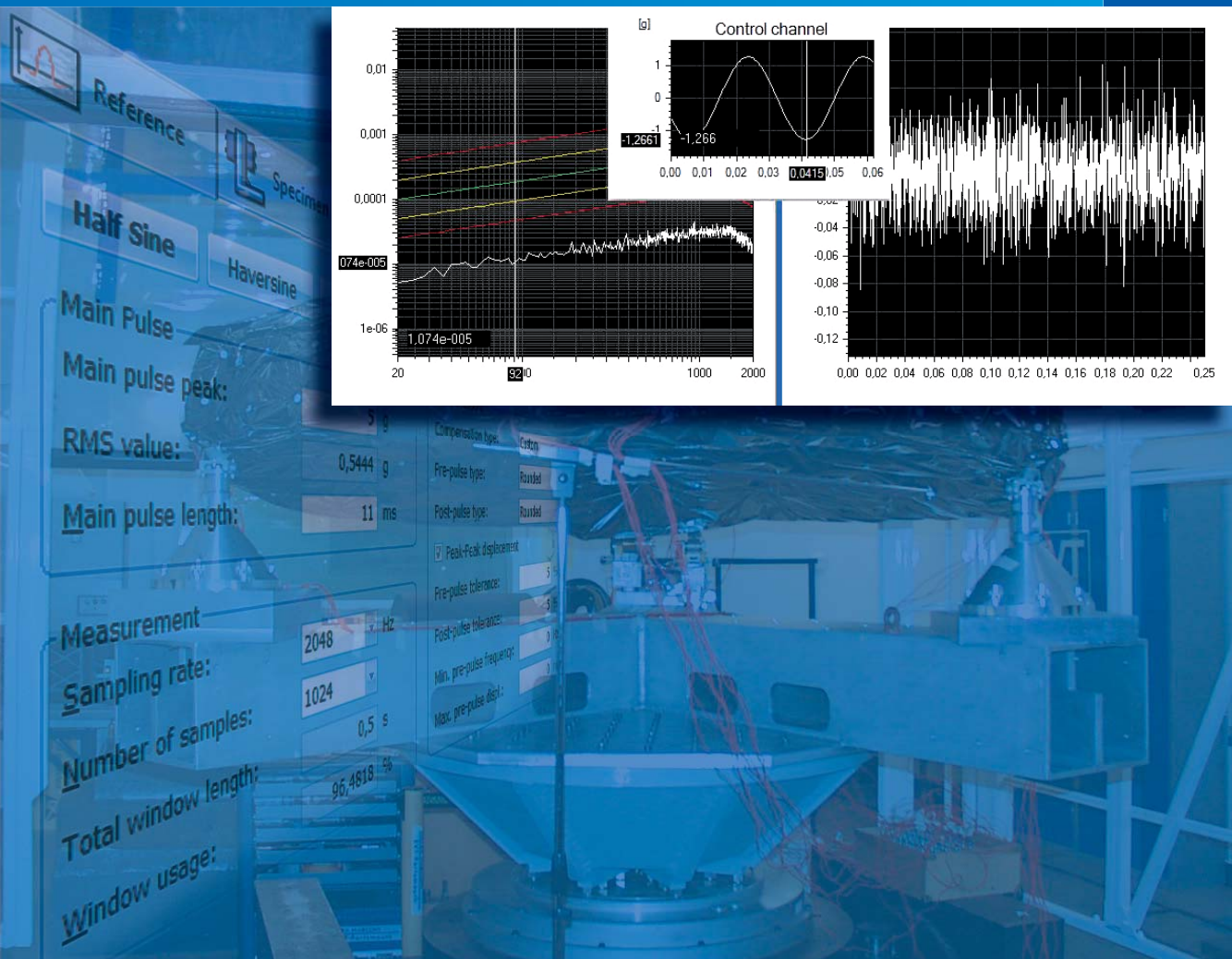


VibControl

Revision 2.11

Update Note

- Online Time Data Display
- Enhanced Axis Scaling
- Extended Notching Capabilities
- Auto-Load of Graphics Configuration
- Classical Shock with Variable Pre- and Post-Pulse
- Windows 7 Support

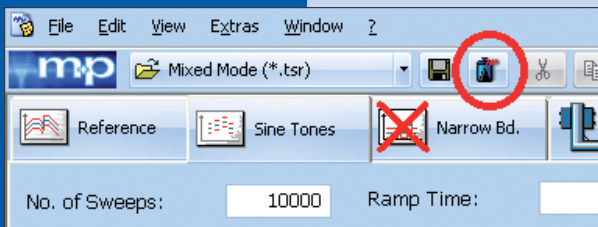
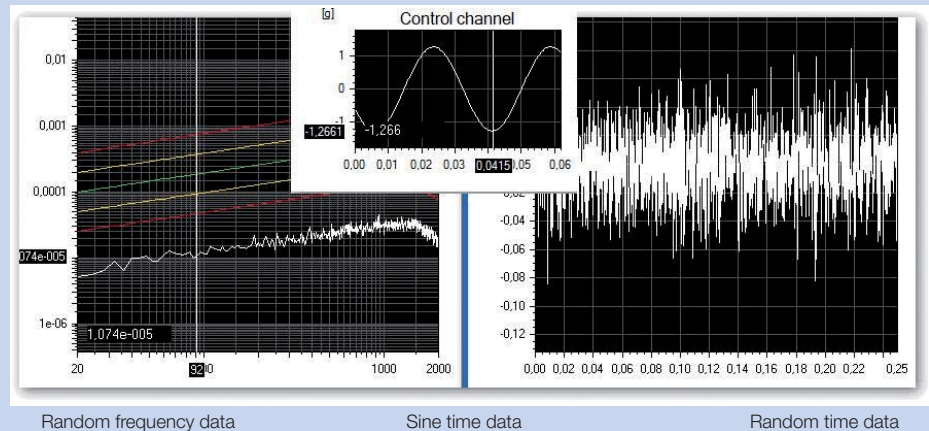


The image displays the VibControl software interface overlaid on a photograph of a vibration shaker system. The software interface includes several key sections:

- Reference and Specimen:** Buttons for 'Reference' and 'Specimen' are visible at the top left.
- Waveform Selection:** Buttons for 'Half Sine', 'Haversine', and 'Main Pulse' are present.
- Main Pulse Parameters:**
 - Main pulse peak: [Input field]
 - RMS value: 0,5444 g
 - Main pulse length: 11 ms
- Measurement Parameters:**
 - Sampling rate: 2048 Hz
 - Number of samples: 1024
 - Total window length: 0,5 s
 - Window usage: 96,4618 %
- Control Channel Graphs:**
 - Top Left:** A log-log plot showing multiple data series with a value of 1,074e-005.
 - Top Middle:** A plot titled 'Control channel' showing a sine wave with values -1,266 and 0,0415.
 - Top Right:** A high-frequency waveform plot with values ranging from -0,12 to 0,08.
 - Bottom Left:** A plot showing a signal with a value of 1,074e-005.
- Configuration Panel:** A panel on the right side of the interface contains various settings:
 - Compensation type: Custom
 - Pre-pulse type: Rounded
 - Post-pulse type: Rounded
 - Peak-Peak displacement
 - Pre-pulse tolerance: 5%
 - Post-pulse tolerance: 5%
 - Post-pulse frequency: 0 Hz
 - Min. pre-pulse frequency: 0 Hz
 - Max. pre-pulse dist: 0

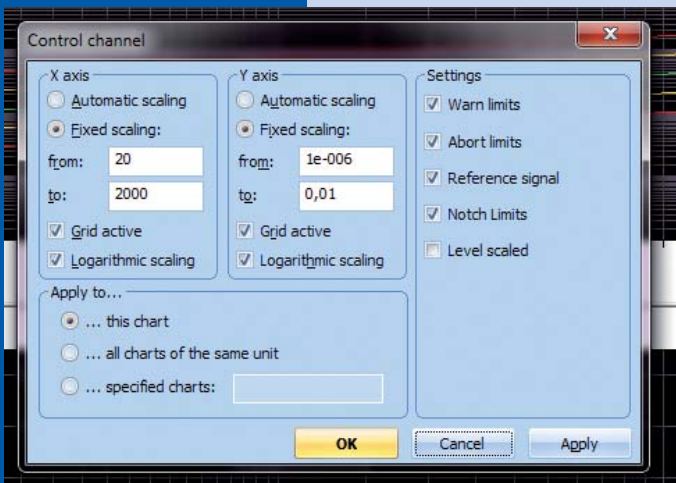
Online Time Data Display (Sine and Random)

VibControl 2.11 displays time data online. In sine and random test mode you can choose between a time data display and a frequency display.



Direct Change from VibEdit to VibRunner

Using the new VibRunner button in VibEdit, it only takes two mouse clicks to save a test definition and load it into the VibRunner where you can start a test directly. There is no need to open the directory and search for the desired file in order to load it.



Enhanced Axis Scaling (VibRunner)

Do you want the same axis scaling for all chart axes with the same unit? VibControl Revision 2.11 offers an improved axis scaling feature. Just configure one of the charts and click the "Apply to all charts of the same unit" button to achieve your graphics requirement.

But this is not the only function the new feature offers: It is also possible to apply the settings to individual charts or to a range of charts you specify. You can also determine the limit types to be shown within these graphics.

Extended Notching Capabilities

m+p international added two new notching options to its VibControl software. These features are supported by both m+p international's VibPilot measurement frontend and VXI hardware.

■ RSS Vector Notching:

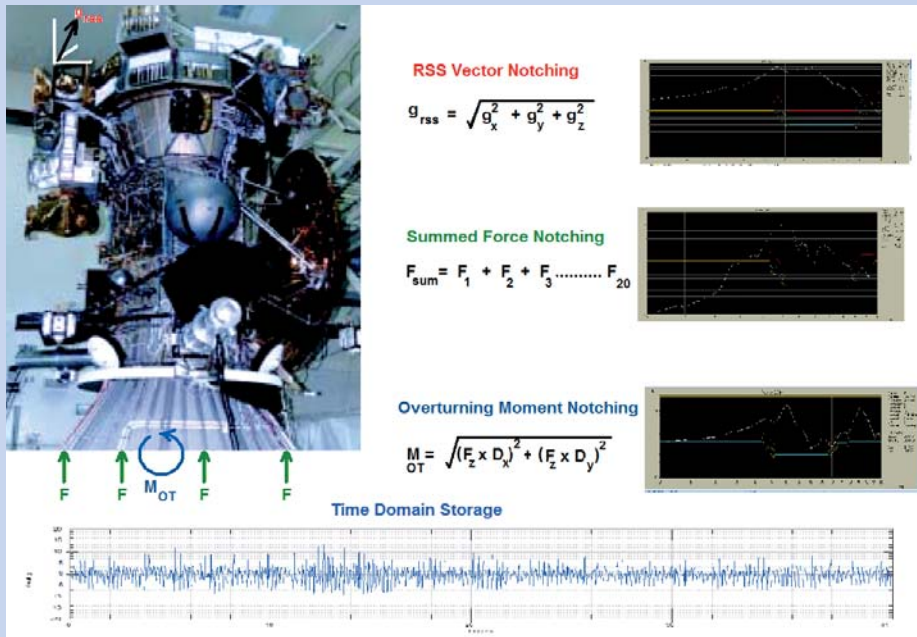
By calculating the resulting vector amplitude the damage to critical parts can be reduced.

This notching feature is typically used with a triax sensor. The amplitudes of the three measurement directions (x, y, and z) are merged to one resulting vector which can be used for notching.

Update Note

Summed Force Notching:

Force transducers can be summed digitally to eliminate the need for an external summing junction as well as to ensure all transducers are within limits. The option offers a signed weighting function which enables you to weight the involved vectors differently. This feature can be used with force transducers which are fixed at a point where they do not measure exactly in notching direction. Applying the weighting function you can perform $\sin \varphi$ and $\cos \varphi$ transformations and thus calculate a force vector in notching direction. This notching feature can be used with force channels but also with acceleration channels (e.g. to calculate the total acceleration of your test object) and other channels.



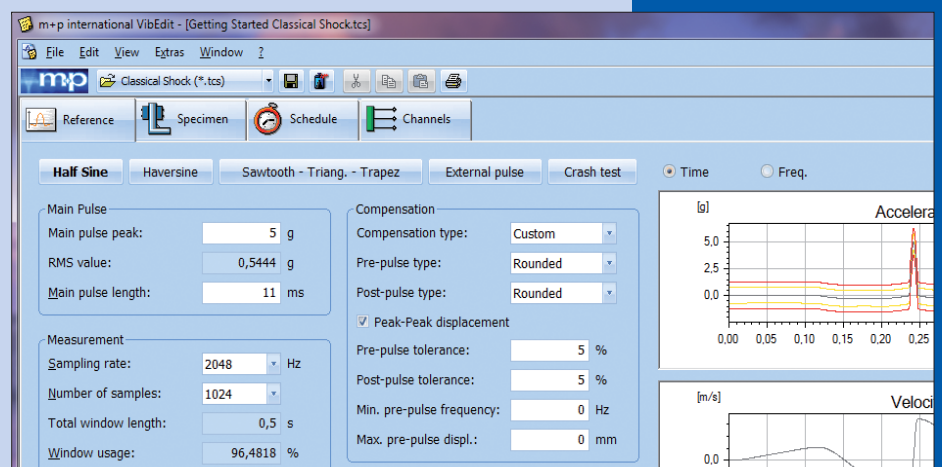
Update Note

Auto-Load of Graphics Configuration

The new version of VibControl offers a very time-saving, convenient feature to load existing graphics configurations. Once you have defined a graphics setup in VibRunner including the order of the channels to be displayed, their scaling, alarm and abort limits, just store it with your test file. When you load the test the next time, enable the auto-load settings option and the test file will come up with the stored graphics setup. This function is very useful for test sequences – each test will be started with exactly the graphics configuration you need for monitoring the most important channels.

Classical Shock with Variable Pre- and Post-Pulse

In classical shock test mode you can vary the pre- and post-pulses by selecting different compensation types. Thus you can perfectly adapt the shock pulse to the shaker in use while considering the available velocity and displacement requirements.



Import Notch Table

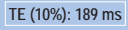
Customers who often have to carry out vibration tests with given notching specifications will appreciate this import option. In sine test mode it enables you to import an ASCII file containing the desired notching limits for every channel. Once you have created this file, you just need to import it instead of defining these limits for each channel separately.

Transducer Check Using Transient Capture Mode

Especially for systems with high channel counts it makes sense to check the transducer function and their wiring before you start your test. Checking the function of every individual channel is done in VibRunner using the transient capture mode. By tapping every transducer you check whether a signal is transmitted or not. When all transducers and their connections are fully operational you can start your test. Using the multi-monitor function is a very convenient way to carry out this check.

Other New Features

VibControl Revision 2.11 provides a lot more enhancements, for example:

- Support of the 32-bit Windows 7 operating system (the 64-bit version is available for some frontend configurations)
- Sine-on-random test mode: Sine tones can be defined using the sweep rate
- Notching on broadbands in mixed modes SoR/RoR/ SoRoR
- Sine dwell: Stepped sine function added (frequency range, step size)
- Automatic calculation of cross-over frequencies in VibEdit is enhanced
- New TE display in SRS mode provides information about the effective shock duration 
- VibMultiPlot now offers display of phase and coherence
- New selfcheck dialog
- Acoustic control: 1/1 octave and 1/3 octave control is selectable

This Update Note provides you with an overview of the most significant product enhancements of VibControl Revision 2.11. There are other new functions that make VibControl even more powerful and user-friendly.

The new software revision has resulted primarily from the close cooperation with you, our valuable customers. We continuously optimize our products. Therefore, if you have any suggestions on how to further improve our product offering, please let us know.

VibControl 2.11 is available now. Please do not hesitate to contact us.

Germany
m+p international Mess- und Rechnertechnik GmbH
Phone: (+49) (0)511 856030
Fax: (+49) (0)511 8560310
sales.de@mpihome.com

United Kingdom
m+p international (UK) Ltd
Phone: (+44) (0)1420 521222
Fax: (+44) (0)1420 521223
sales.uk@mpihome.com

China
Beijing Representative Office of m+p international
Phone: (+86) 10 8283 8698
Fax: (+86) 10 8283 8998
sales.cn@mpihome.com

USA
m+p international, inc.
Phone: (+1) 973 239 3005
Fax: (+1) 973 239 2858
sales.na@mpihome.com

France
m+p international Sarl
Phone: (+33) (0)130 157874
Fax: (+33) (0)139 769627
sales.fr@mpihome.com

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