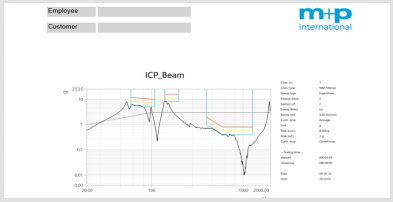
Update Note

m+p VibControl

Release 2.18

We are pleased to present the new revision 2.18 of our m+p VibControl vibration controllers for advanced environmental testing. The new functions make it easy to conduct high quality vibration testing and improve your user experience, because our ambition is to make your daily work as easy and efficient as possible.

Overview of release contents



New application highlights

- Introducing new reporting features – Save time and elevate report quality
- Remote command API
- Acoustic notching – Protect your DFAN test objects

Testing & automation enhancements

- Sine dwell and stepped sine ramp up mode
- Sine test without self-check – Save time and boost efficiency
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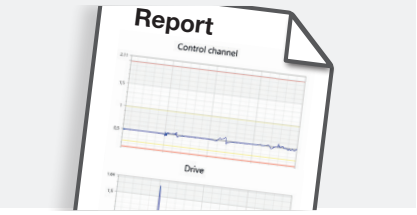
User interface improvements

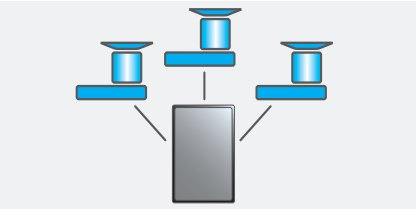
- Save time with enhanced SRS pass / fail criteria in SRS mode
- Polish UI translation – Simplify your use of m+p VibControl
- Sine dwell data exported as CSV – Streamline analysis and insights

New application highlights



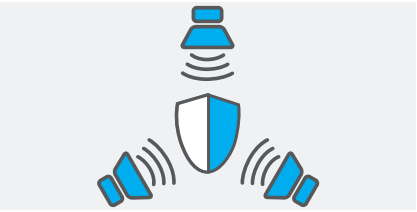
Elevate report quality and save time with new features

The new reporting features offer a clear, structured information breakdown with easily understandable charts, using consistent colors, line thicknesses, font sizes, and layout from test setup to documentation. Users can personalize reports with their company logo and export them in editable Word or PDF formats. Charts are attractively rendered, and reports are automatically saved in an optimized folder structure.



Remote command API

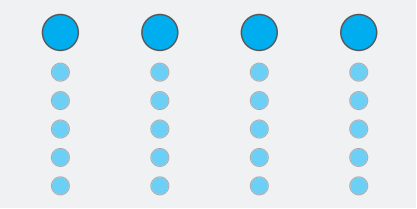
The remote command API allows you to interface m+p VibControl with your custom software tools. For example, you can remotely control your m+p VibControl test from a tablet using a simplified user interface. The control functions include starting and stopping test runs, scheduling commands, and adjusting frequency and amplitude for sine test runs.



Acoustic notching – Protect your DFAN test objects

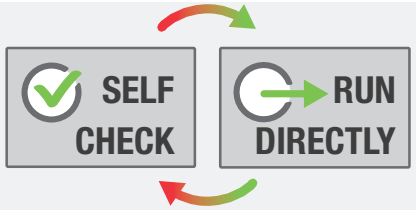
Acoustic excitation tests, whether in reverberant chambers or for DFAN, are now even safer. To protect the test specimens, mechanical vibrations can be notched and limited to the RMS value, in addition to a linear or logarithmic notch profile. This can be done individually for each channel.

Testing & automation enhancements



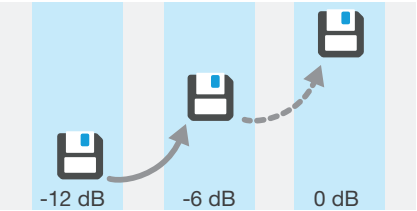
Sine dwell and stepped sine ramp up mode

In Stepped Sine Mode, the frequency is changed in steps. With this new feature, you can start the excitation at the next frequency with a lower amplitude and automatically ramp up to the target value. This prevents overshooting and can reduce the test time needed to reach a steady response at full level.



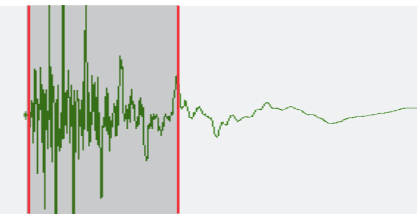
Sine test without self-check – Save time and boost efficiency

Users now have the option to perform sine tests with or without a self-check, allowing for time savings. They can decide whether a self-check is necessary. This option is particularly beneficial for tests involving shorter frequency ranges, unplanned adjustments of test parameters, or repeated resonance search tests in a sequence. In these cases, it offers considerable added value.



Save random spectra at level switches – Enhancing documentation

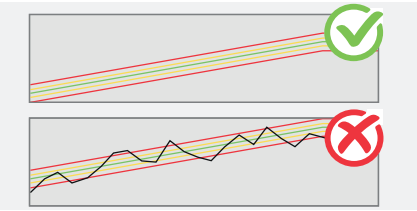
Automatically save the results of each level stage for random excitation testing. This feature ensures traceability and clarity, particularly useful when random excitations start at low levels (e.g. -12 dB) and progress to full amplitude. It helps maintain a record in case unintended events occur at lower levels during the test.



New ‘concentration of energy duration TE’ in shock SRS

We have added a new feature in VibEdit to calculate the “concentration of energy duration TE” for MIL-Std 810F compliance. TE represents the minimum time span covering all magnitudes exceeding 1/3 of the peak in absolute value. During test setup, both the duration value and a time-based visualization are provided for clear user understanding and standard compliance.

User interface improvements

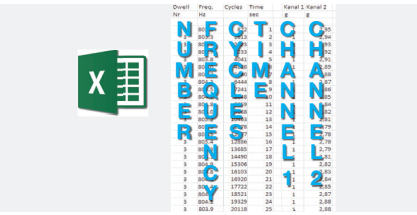


Save time with enhanced SRS pass / Fail criteria in SRS mode

With the criteria check, the user can precisely assess the quality of their test. They can freely define various criteria, such as the number of spectral lines above a reference, exceeding abort limits, and more.

Polish UI translation – Simplify your use of m+p VibControl

To further simplify the use of m+p VibControl for our Polish-speaking customers, Polish language support is now available. Miłej zabawy z testowaniem wibracji!



Sine dwell data exported as CSV – Streamline analysis and insights

In Sine dwell testing, the data is now stored in a CSV file that is organized and structured clearly. This allows users to analyze the amplitude over cycles and frequency using tools like boxplots, providing a detailed view of the test specimen's response to resonance excitation. Furthermore, users can conduct diverse analyses and seamlessly integrate the data with other tools to gain comprehensive insights.

m+p VibControl support

Documentation & contact

The following datasheets are available for more information:
m+p VibControl Shaker Vibration Testing for Launch Qualification
m+p VibControl RFAN Qualify Large Spacecraft in Reverberant Testing Facilities
m+p VibControl DFAN Qualify Satellites for Launch via Direct Field Acoustic Testing

Contact us via info@mpihome.com to:
Receive a free trial version of the m+p VibControl software
Discuss your individual requirements and questions

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