



EDM 7.1

Engineering Data Management Software Release Notes

SPIDER VIBRATION CONTROL, EXPERIMENTAL MODAL ANALYSIS, DYNAMIC SIGNAL ANALYSIS, POST ANALYZER



TABLE OF CONTENTS

RELEASE HIGHLIGHTS	3
Supports New Hardware	3
NEW FEATURES	3
New Features in EDM Vibration Control Software	3
Major Improvements	5
Software Release History	5
System Requirements	5
Minimum System Requirements:	5
Recommended System Requirements (Minimum for Spider Systems Higher than 16 Channels):	5
Version Compatibility	5

RELEASE HIGHLIGHTS

Supports New Hardware

EDM 7.1 supports a new version of Spider hardware

- Spider-81, brand new exterior and improved performance.



- Spider-81B, brand new exterior and improved performance.

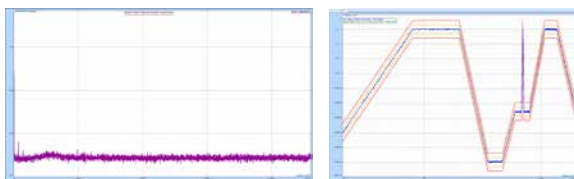


- Spider-80X, improved performance.



Benefits of new hardware:

- Dynamic range goes up to 160 dB



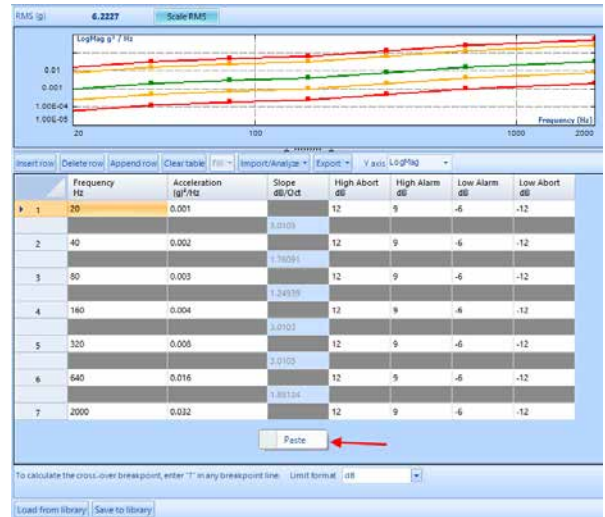
- Lower noise for charge sensors
- Input protection voltage increased to 220V
- Compliant with CE electrical safety and EMI shielding standards
- Elegant and modern updated exterior (Spider-81/81B)
- Indented channel connectors prevent collision and damage (Spider-81/81B)

NEW FEATURES

New Features in EDM Vibration Control Software

- Copy a breakpoint table from Excel and paste it to the Random/Sine Profile Editor.

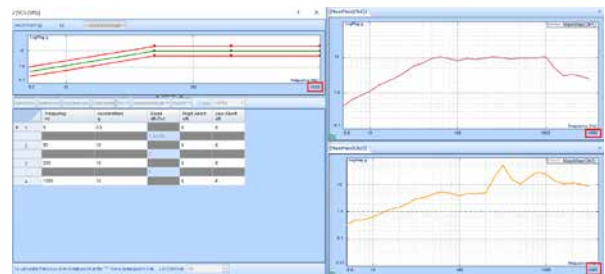
Frequency (Hz)	Acceleration	High Abort (dB)	High Alarm (dB)	Low Alarm (dB)	Low Abort (dB)
20	0.001	12	9	-9	-12
40	0.002	12	9	-9	-12
80	0.003	12	9	-9	-12
160	0.004	12	9	-9	-12
320	0.008	12	9	-9	-12
640	0.016	12	9	-9	-12
2000	0.032	12	9	-9	-12



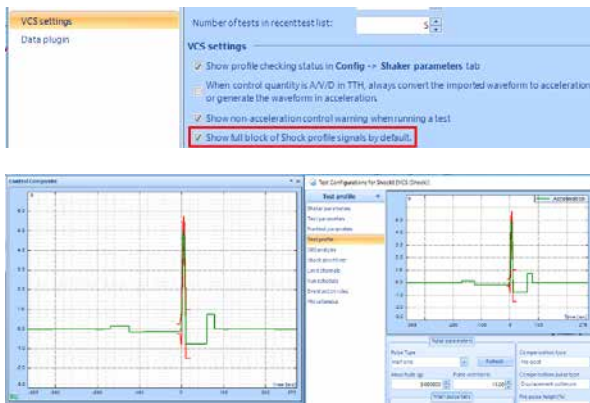
- Channel settings may be copied from Excel and pasted to EDM or vice versa.

Chn	Channel Type	Location ID	Module/Chn	Measurement	Engineer	Sensitivity	Input mode	Filter	Max. sensor	High-Pass
1	Chn-Mon	01	Chn-Mon	Acceleration	g	100.0000 (avg)	AC Single End	0	20.0000 (V)	0
2	Chn-Mon	02	Chn-Mon	Acceleration	g	100.0000 (avg)	AC Single End	0	20.0000 (V)	0
3	Chn-Mon	03	Chn-Mon	Acceleration	g	100.0000 (avg)	AC Single End	0	20.0000 (V)	0
4	Chn-Mon	04	Chn-Mon	Acceleration	g	100.0000 (avg)	AC Single End	0	20.0000 (V)	0
5	Chn-Mon	05	Chn-Mon	Acceleration	g	100.0000 (avg)	AC Single End	0	20.0000 (V)	0
6	Chn-Mon	06	Chn-Mon	Acceleration	g	100.0000 (avg)	AC Single End	0	20.0000 (V)	0

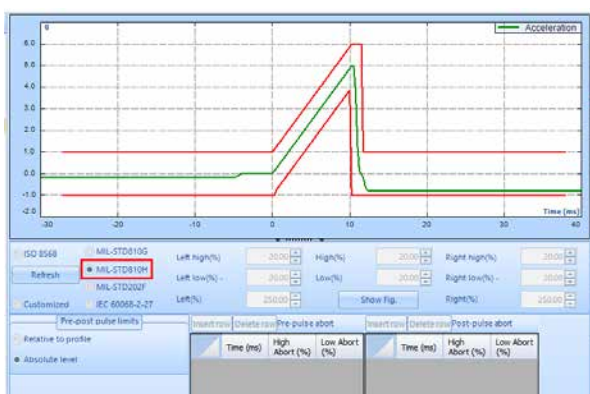
- Display a wider frequency range of SRS signals than the SRS profile.



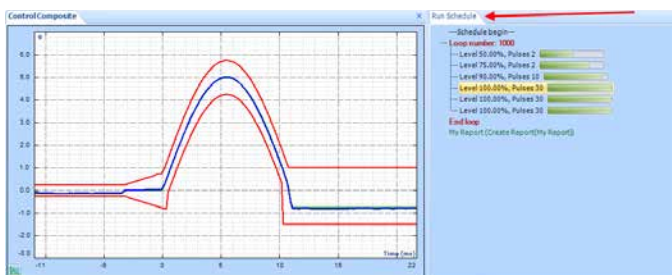
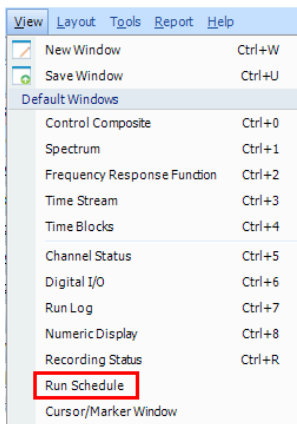
- An option to set to display the whole block of shock pulse by default



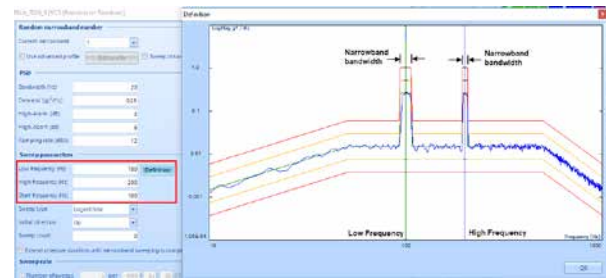
- Support MIL-STD810H in Shock



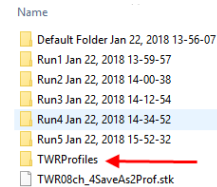
- New Run Schedule Display shows where the test is running at.



- Updated the definition of narrowband configuration.

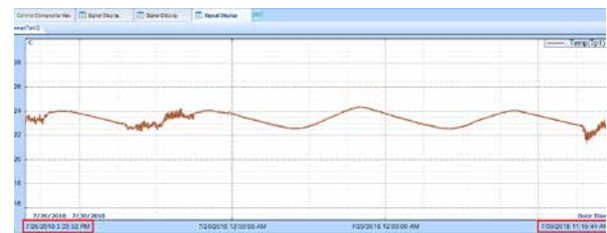


- TWR profiles are copied with the test to the destination folder when the user runs the command "Save test with Run Folder".

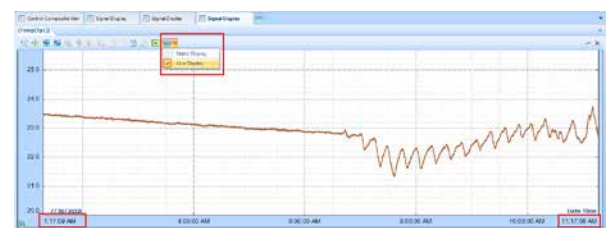


- Introduced Static display and Live display for temperature and humidity signals.

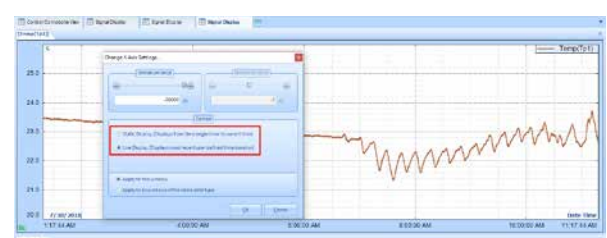
Static Display of a temperature signal showing test data for over 3 days.



Live Display of a temperature signal showing test data from the past 10 hours. Signal display updates much faster than the Static Display.



In the X-axis settings, toggle between Static and Live display and specify the display range.



MAJOR IMPROVEMENTS

- Data package loss prevention in long duration tests (>4 days) for high channel count systems.
- High channel count communication enhancement. Supports increased channel surveillance capabilities including increased notching, limiting, and alarming functions for up to 512 channels.
- Updated system requirements for Spider systems higher than 16 channels (see system requirements section).
 - The EDM installed computer MUST be equipped with a 1Gbps Ethernet port and also be connected to the Spider system with network cables provided by Crystal Instruments.
 - The firmware version of the Spider-HUB should be at least 2.0.5.17. (If your version is older, contact Crystal Instruments for instructions regarding firmware updates and the firmware file.)

SOFTWARE RELEASE HISTORY

Type	Release	Exact Version	Release Date
Release	EDM 5.0	CI 5.0.0.2	11/27/2014
Patch	EDM 5.0.1	CI 5.0.1.3	2/27/2015
Release	EDM 5.1	CI 5.1.0.6	8/12/2015
Release	EDM 6.0	CI 6.0.0.1	5/19/2016
Patch	EDM 6.0.2	CI 6.0.2.9	8/9/2016
Release	EDM 6.1	CI 6.1.0.4	2/7/2017
Patch	EDM 6.1	CI 6.1.0.27	8/22/2017
Release	EDM 7.0	CI 7.0.0.6	2/1/2018
Patch	EDM 7.1	CI 7.1.0.7	7/19/2018

SYSTEM REQUIREMENTS

Minimum System Requirements:

- Operating System Support: Windows 7 SP1 or higher
- Operating System Type: 32-bit or 64-bit
- Processor Speed: 1.5 GHz Dual-Core x86
- RAM: 4 GB
- Available Storage Space: 10 GB

Recommended System Requirements (Minimum for Spider Systems Higher than 16 Channels):

- Ethernet Speed: at least 1Gbps Ethernet port on the computer
- Network Cables: provided by Crystal Instruments
- Operating System: Windows 10, 64-bit
- Processor: Intel Core i7, 2.0 GHz or Higher
- RAM: 8GB DDR3 1600 or higher
- Available Storage Space: 10 GB
- Spider-HUB Firmware Version: 2.0.5.17 or higher

VERSION COMPATIBILITY

Product and Software Version	Firmware Versions
Spider-80X/80Xi	
EDM Testing 7.1.0.7	7.1.0.7
Spider-81 (v7.x)	
EDM Testing 7.1.0.7	7.1.0.7
Spider-81B (v7.x)	
EDM Testing 7.1.0.7	7.1.0.7
Spider-80SG	
EDM Testing 7.1.0.7	7.1.0.7
Spider-20/20E	
EDM Testing 7.1.0.7	7.1.0.7

Product and Software Version	Firmware Versions
CoCo-80	
EDM 6.0.2.9	4.0.21
CoCo-80X	
EDM Testing 7.1.0.x (EDM CoCo for DSA)	1.4.0