

LDS-Dactron Shaker Control Version 6.2

1. Major Enhancements

Fatigue Monitor

The capability in Random to set alarm and abort limits around the Hinv function has been extended to include any defined transmissibility function or any input spectrum.

Shaker Force Estimation

The force requirements of the test profile can be compared to the shaker's performance limits with visual alerts to notify the user that the test exceeds the shaker's capability.

PC Camera

A simple PC camera can be connected and the real-time camera images shown in a special window in the Shaker Control application.

Improved RSTD

The tracking algorithm has been enhanced and now it is possible to seed the dwell table with a saved transmissibility function. Only one search sweep is necessary when using multiple transmissibility functions as dwell references.

SoR Single Tone Control

This feature allows manual control of the sweep of a tone in Sine on Random.

Signal Viewer Utility

A new utility allows the user to open a display plot of any data file just by double clicking on the file name in Windows Explorer.

Windows Vista Support

The new version supports compatibility with the Windows Vista operating system.

Improved test monitoring and logging

A new Project Sequence window has been added so that the user can easily monitor the execution status of a project sequence. Also the Run Log documentation has been enhanced to provide more information such as the pre-test levels and times.

Automatic conversion of non-acceleration signals

The signals from velocity or displacement sensors may be overlaid in a display with accelerometer signals with automatic conversion of the velocity or displacement signal to acceleration.

Automatic Quick Report close and save

The Report Setup dialog now has an option that enables Word reports to be automatically saved after they have been created. This feature is particularly useful for long duration tests with reports periodically created.

2. Enhancements by Customer Report Number

General

- 2051 Project Sequence - enhancement to provide status log of the progress of the sequence execution
- 2547 VCS Control Parameters - Drive Limit (Volts) is unclear to some user's
- 2613 VCS Project Sequence - request to save "Repeat this sequence" entry with the project sequence file
- 2809 Password security -Add user email address and use this as the default in Preferences when the user logs in
- 2855 Add a warning message to the setup dialogs that a test is running and the parameters cannot be changed
- 2862 Automatically convert velocity data from a Velocity channel to acceleration when overlaid in a display with accelerations signals
- 2890 In Cursor Global Setup, "Normal Cursor" tab, making "Display the complete engineering units in the cursor window" enabled as the default value.
- 2647 Preferences - User selection to make setup changes effective immediately added.
- 2665 Added detailed record of events in pre-test

Global Parameters and Start-up Page

- 2616 VCS Global Parameters Settings - allow custom channel usage in Input Channel Settings

Random, RoR and SoR

- 1806 Signal Limits added to Random to allow fatigue monitoring of the Hinv function or any transmissibility function or input PSD.
- 2597 VCS multi-channel control - request to provide message indicating which control channel caused an abort
- 2756 Sine on Random enhancement for user manual control of a single tone. Supported with Remote Control Pendant in addition.
- 2860 Sine on Random maximum number of tones increased to be 20

Sine & RSTD

- 2654, 2868 Sine Quick Report - Remove Control Peak and Demand Peak labels and values from plot
- 2820 Preferences option to erase the previous sweep trace
- 2821 Sweep Rate readout display added to the Control Panel

Shock

- 2548 VCS SRS - Add Max and Min Acceleration values to Profile > Compensation tab
- 2770 Add generic Classical Shock pulse tolerance limits table
- 2007 Customized abort tolerances for Classical Shock with Relative/Absolute capability

LTH & Waveform Editor

- 2774 Waveform Editor - In the Control Panel also include a readout of the waveform's total duration (hh:min:sec).
- 2776 "LTH - Need a display of the profile schedule Loop number and Repeat count
- 2777 LTH - Import profile - use the file name as the default name when the waveform is imported
- 2779 Add capability to read MTS RPC III data files
- 2823 LTH - Need to be able to save a text header with user description when the profile is saved in waveform editor and then read and display the header in LTH profile menu
- 2825 LTH - Pre-test profile - ability to delete a range of frequencies in the break point table after a PSD has been imported

Channel Parameters

- 2827 Need to be able to enter a negative sensitivity to correct for 180 deg shift in the accelerometer or if the mounting point on the fixture is only possible with the accel upside down.

Displays

- 2193 VCS - request to allow display of peak cursors on multiple channels simultaneously
- 2657 VCS Cursor Marks - add option to Calculate Q Factor Value with Cursor Marks
- 2790 Waterfall for Sine - each slice should correspond to one sweep, not one frame of data
- 2830 Cursor - need selection for thin or faint cursor line so it easier to see the data trace where the cursor is located
Line Properties allows setting the signal's line thickness as well as color

Reports

- 2273 VCS Quick Report - add capability to save/recall run-time parameters and include in reports
- 2793 Schedule Quick Report - Need the capability to define the report contents for each instance in the schedule.
- 2794 Write Quick Report as file instead of opening Word and inserting a new document; the problem is on long duration tests using the Schedule to periodically create a report, Word eventually crashes because too many documents are open.
- 2832 Need a way to show the application screen when a screen saver is active so that auto reports in the schedule do not capture the screen saver graphic.
- 2625 In VCS 6.0, the MS-Word Template pull-down is now missing, where this function was there in the previous V5.82 software

Remote Viewing and Status

- 2805 Email - automatically attaches the run log to the email message.

2. Issues Fixed by Customer Report Number

General

- 2585 VCS Recall Signal Manager - On the right-click " Save As for ASCII Y-only" the message is missing text in dialog
- 2644 VCS Analyze Anywhere - Channel Parameters for the Filter settings are missing
- 2652 VCS/RT Pro Email function - problems in "Body" field
- 2653 VCS/RT Pro Test ID - change left/right arrow keys to work within fields
- 2669 VCS Profile Table - right-click pop-up menu leaves gray box on screen
- 2675 VCS Signal Manager - problems when attempt ing to open the signal manager setup
- 2680 VCS Channel ID - use Channel ID label option causes auto save signals to be disabled
- 2688 VCS Analyze Anywhere - user cannot display more than channel 1 signal data with multiple channels enabled
- 2710 VCS Project Sequence - Clicking on Close Window does not warn the user that the shaker is running
- 2723 VCS Display Refresh function - displays are cleared of current signal data when the user clicks on setup dialog OK button
- 2724 Signal Saving issue - input(f) signals are not saved unless the Signal Manager Window is open
- 2750 When Chan Id labels are used for signal names the data is not saved
- 2874, 1879, 2880 The radius value specified doesn't seem to be applied correctly in the V6.X software.
- 2743 Previously defined response and transmissibility channels cause software crash.
- 2995 Amplifier Control software communication issues with shaker control software.

Global Parameters and Start-up Page

- 2641 VCS Start-up Page crash
- 2689 VCS Global Parameters - changes made to current project affect Global Parameters setting on start-up page
- 2752 A change to the Engineering Units does not result in a change to the Channel Parameters sensor sensitivity values.
- 2753 Startup Page - Selecting all options active on Global Parameters causes a software crash.

Random, RoR and SoR

- 2638 VCS Random - Complex Transmissibility data is being scaled at different test levels
- 2686 VCS Random Profile Setup - rows created by Insert Row causes entered frequency values to change
- 2711 Random - RMS readout when PSD displayed as displacement reads in Grms
- 2712 VCS Random Composite Display at abort is not shown
- 2714 VCS - Random Control PSD incorrectly scaled when low level test ends, abort signal problem

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- 2728 VCS Sine On Random - broadband random data loses DOF/averaging once sine tone passes through.
 - 2757 Limiting - need to abort the test if the limit channel signal is lost
 - 2758, 2861 SoR - Profile - Profile limits need to be calculated based on sine tone instead of random rms basis with sigma factor.
 - 2768 V6.0 Random & Sine Profiles - Can't use keyboard arrows any longer

Sine & RSTD

- 2245 VCS Sine - Resonance Table - frequencies over 1kHz use a truncated exponential format
- 2250 RSTD - transmissibility signal based on acceleration control and displacement monitor is off
- 2491 VCS Sine, Math Operations - divide by operation for input signals incorrect
- 2566 VCS Sine - Resume from abort causes sweep to resume in wrong direction
- 2637 VCS Transmissibility/Coherence signals - display unit problems
- 2761 RSTD loss of resonance followed by a lock-on to a non-resonance frequency.
- 2763 Sine Special Signals, Math Operations - If you multiply the spectrum by a constant the resultant signal is low by a factor of 10
- 2764 Limiting - need to abort the test if the limit channel signal is lost.
- 2765 Shaker Parameters - Default shaker (Typical Shaler as typo for Shaker).
- 2767 RSTD - The transmissibility display label shows g but it should be g/g.
- 2768 V6.0 Random & Sine Profiles - Can't use keyboard arrows any longer

Shock

- 2495 VCS TTH - additional (invalid) pulse output after single pulse in isolated cases
- 2580 Skip Pre-Test report did not work for Classic Shock.
- 2664 VCS TTH - Profile, Create From Model dialog is not displayed properly when opened
- 2674 VCS TTH - time history signals are cleared from the display when Schedule Mode Off is active, it seems only drive(t) is lost
- 2693 TTH - Profile, Create from Model dialog is transparent
- 2772 TTH - Newly imported Profile does not get updated in Composite display until Start is pressed.
- 2866 VCS, Shock, seen discontinuity at the end of pulse
- 2888 After pressing PAUSE, the drive will become 0 and input will be higher than drive signal by a DC difference

LTH & Waveform Editor

- 2021 LTH - disable "Warning..." error for repeated profiles
- 2564 Waveform Editor - Software crashes on compensation operation
- 2780 Waveform Editor - When importing a waveform the default setting for the Units should be the same as what is in the Engineering Units dialog. If gn is used in the EU dialog then the Import Profile dialog should use gn as the default.
- 2781 Waveform Editor - Import Profile does not use the same Compensation as set in the Compensation Template. The high pass filter frequency is different.

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- 2783 LTH - Profile menu AVD displays - the velocity and displacement waveforms show a longer time duration than the acceleration waveform
 - 2784 LTH - Pre-Test profile. Programmed in 10 to 6000 Hz but profile did not show the correct flat profile (zero above 1 kHz).
 - 2824 Waveform Editor - The X axis auto-scale does not work properly.

Math Operations

- 2789 The display shows units of g's when one spectrum is divided by another spectrum. The software needs to show units of both spectrums.

Displays

- 2049 X axis unit missing in cursor label
- 2286 VCS Cursor Global Setup - Normal Cursor, Label Mode > Digits setting not saved
- 2497 VCS Random - Report Legend, PSD RMS value off by a factor of 10
- 2525 VCS Channel Status - "Freeze the status display..." checkbox selection not saved with project
- 2535 VCS Transmissibility Signals - Complex Transmissibility & Coherence don't retain last frame of data at ramp-down. DSP should not update the signals for those computing trans. Signals
- 2544 VCS Shock - Normal Cursor jumps to right/left when using the up/down arrow keys
- 2577 VCS Sine - Link Global Cursor Movement doesn't work for Complex Transmissibility signals
- 2715 VCS - Units label error in exported transmissibility as ASCII X-Y
- 2716 VCS - Units label on transmissibility is wrong
- 2831 Displays - if you change the units label to a custom text string, it eventually reverts back to the default label or is blank

Reports

- 1457 VCS - RSTD, Quick Report missing Dwell Event data
- 2130 Active Report - Deletes the wrong signal when using Contents
- 2234 VCS/RT Pro Report - String and Legend overlaid when report generated
- 2543 VCS Shock - Quick Report missing "Pulse Width" parameter

- 2683 VCS Active Report - Composite Plot is blank when generate report using Project Report
- 2707 Template Report setup dialog - the font is so small that it is unreadable
- 2720 Parameters normally at the bottom of the pane plots in a Normal Word Report don't seem to be there for an Active Report
- 2722 Quick Report - Data trace extends across the X axis for some Sine Oscillator and Sine quick report plots or template report plots
- 2731 VCS Swept Sine - Quick Report shows "Not implement" for Integer Sweep Event in Schedule
- 2795 Quick Report with Active plots does not include header and footer text lines

2884 The Runlog output through quick report is missing the last four entries compared to that on the screen.

NET-Integrator

2063 fRANDOMSTATUS Array index values not working
2501 iRANDOMSTATUS and fRANDOMSTATUS array problems
2531 RunStatus Value 11 not working for Integer Status Arrays

Thermal Chamber Interfaces

2681 VCS Chamber Interface - Controlled Value and Set Point units mismatch

Data Export/Import

2254 Export to Excel - Data are stored as Text instead of Number, so they can't be used in data plots in Excel
2527 VCS - control(f), profile(f) signal are scaled by a factor of 100
2533 Support San Esu file format
2584 VCS - SIG files converted to ASCII (.txt) are scaled by a factor of 1/100
2605 V6.0 seems to have lost the Signal Save Settings > File Management > Complex Signal Export Format in ASCII File option.

Remote Control Pendant

2679, 2678, 2511 Improvements in pocket PC interface software and communication to shaker control software.