

# **DATA ACQUISITION**

### DAS-105 SHOCK DATA ACQUISITION SYSTEM

Introducing the DAS-105 shock data acquisition and analysis system. The DAS-105 represents the latest advancement in shock event detection technology. With a high speed, low noise hardware design, and an easy to use software based graphical interface, the DAS-105 is the perfect blend of performance and user convenience.

#### WHAT DOES THE DAS-105 OFFER?

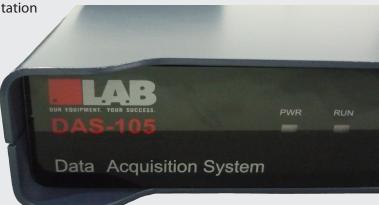
- Up to 8 channels dual DSP distributed architecture (standard package is 4 channels)
- All DAS Systems come standard with a Triax Accelerometer
- Plug and play USB interface
- ICP or analog input
- 24 bit resolution for analog-to-digital conversion
- 192 KHz sampling frequency per channel
- Built in programmable amplifier or ICP constant flow signal conditioning
- 0.1 to 100ms pulse duration capture
- Manual or automatic triggering modes
- FFT, time domain, shock response, force deflection, and RSS analysis
- Flexible filtering options
- Detects Half-Sine, Square, Trapezoidal, Clock, Triangle, and Sawtooth Waveforms

#### **DAS-105 FEATURES**

- Custom real-time data storage & presentation
- Programmable testing parameters
- Real-time auto scale graphing
- Programmable home preset for repetitive testing
- Universally exportable data format
- Custom control & presentation options available
- Data storage and retrieval
- Multi and single set graphing
- Static (warehouse) simulation control settings for load, duration, and displacement
- Complies with ASTM, ISO, and other internationally recognized standards

#### DATA STORAGE

- Playback: Manually play back shock waveforms
- Automatically saves signals



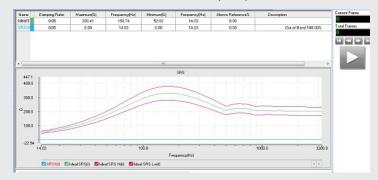
Windows 8





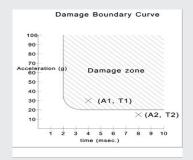
## **DATA ACQUISITION SOFTWARE**

#### SHOCK RESPONSE SPECTRUM (SRS) ANALYSIS \*



- Resolution: 1, 1/2, 1/3, 1/6, 1/12, 1/24th multiple frequency formula analysis
- Analysis of parameters: Adjustment of D (damp) and Q value, individually adjusting upper and lower limit and reference frequency
- SRS Chart, SRS Cascade Observation, Force deformation analyst, Triaxial analyst, and Torsion impact analyst
- SRS Definition: Calculation of SRS via ideal waveforms, automatic generation of RRS, setting of allowance in RRS table or waveform

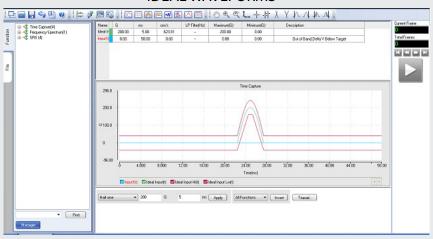
#### DAMAGE BOUNDARY CURVE (DBC) \*



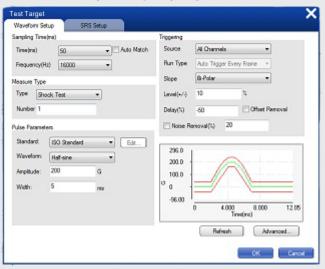
- Measures frailty of product
- Critical velocity change is determined
- Knowing the DBC will reduce testing on standard products that have been modified
- Reduces cushioning of packaging and overkill in the design process

\* Standard on 8 Channel DAS-105, optional on 4 Channel

#### **IDEAL WAVEFORMS**



#### **TEST TARGET SETUP**



#### **FILTER SETUP**



Due to our continuous commitment to product development, the above specifications and features may be modified without notice.