OUR EQUIPMENT. YOUR SUCCESS.

ACCESSORIES

DATA ACQUISITION DAS-105

INTRODUCING 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 16-channels dual DSP distributed architecture (standard package is 4 channels)
- Plug and play USB 2.0 interface
- ICP or analog input
- 16-bit resolution for analog-to-digital conversion
- 1 MHz 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
- SRS, FFT, time domain, shock response, force deflection, and RSS analysis
- Flexible filtering options
- Detects Half-Sine, Square, Trapezoidal, Clock, Triangle, and Sawtooth Waveforms

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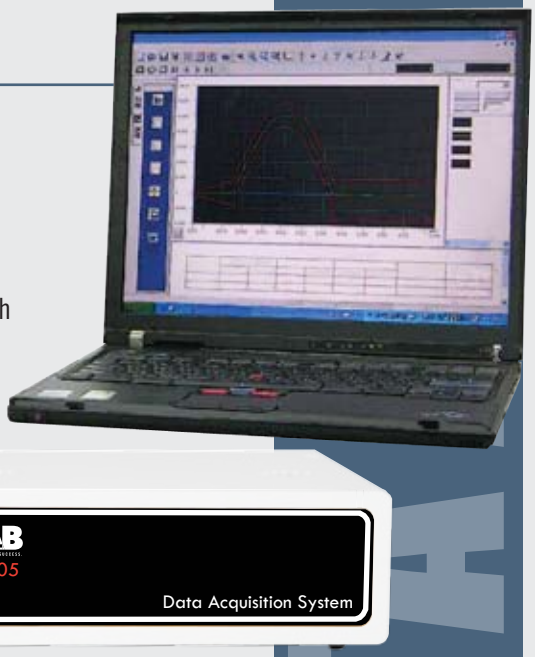
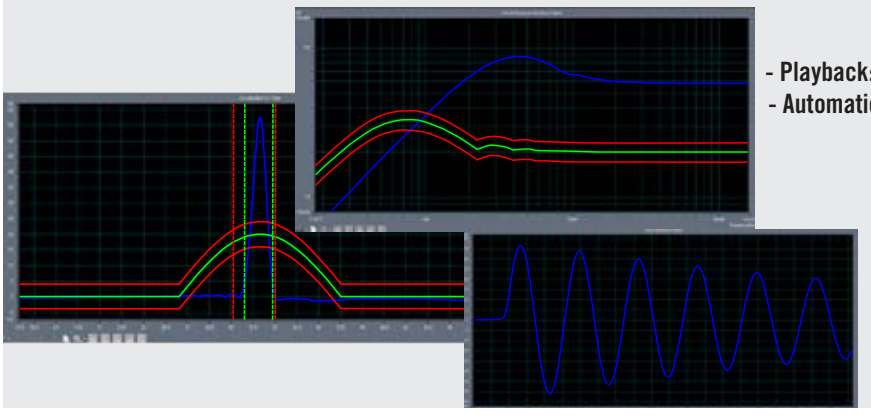
DAS-105 FEATURES

- Programmable testing parameters
- Custom real-time data storage and presentation
- Real-time auto scale graphing
- Complete turnkey system with Windows computer system, high resolution color monitor, and high quality printing system
- Programmable home preset for repetitive testing
- Static (warehouse) simulation control settings for load, duration, and displacement
- Custom control and presentation options available
- Real time auto scale graphing
- Data storage and retrieval
- Multi and single set graphing
- Universally exportable data format
- Complies with ASTM, ISO, and user defined





DATA STORAGE

- **Playback:** Manually play back shock waveforms
- **Automatic storage:** Automatically save signals

Includes L.A.B. Factory Installation of hardware and software. Software upgrades and technical product support (phone or by e-mail) for 12 months.

SHOCK RESPONSE SPECTRUM 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 definition: Calculation of SRS via ideal waveforms, automatic generation of RRS, setting of allowance in RRS table or waveform
-SRS Chart, SRS Cascade Observation, Force deformation analyst, Triaxial analyst, and Torsion impact analyst

HARDWARE DESIGN

- Low profile, high speed, real time and low noise
- Dual DSP distributed architecture
- ICP/analog input
- USB 2.0 interface, high speed transmission
- Plug and play

SOFTWARE DESIGN

- Windows 2000/XP based OS, easy to operate
- Hierarchal design
- DSP: Real-time signal acquisition, filtering, real-time signal analyst, test procedure monitoring, and interface with mainframe
- Mainframe computer

TIME DOMAIN TRANSIENT STATE CAPTURE

- Sampling frequency: 1,024 kHz
- Pulse duration: 0.1-100ms
- Sampling instant: 1, 2, 5, 10, 20, 50, 100, 200, 500, 1000ms

CHANNEL SETUP

- Channel type, sensor type
- Measuring formula, sensitivity
- Coupled mode, installation direction

TRIGGERING MODE

- Triggering source: Input channel
- Triggering edge: Double edges
- Triggering degree: At 1-99% of the acceleration setting of ideal waveforms
- Extended triggering time: Prefix triggering
- Triggering Mode: Manual or automatic
- Automatic de-noising: De-noising percentage setting, idea waveform pulse width setting

IDEAL WAVEFORMS

- Waveforms: Half-Sine, Square, Trapezoidal, Clock, Triangle, Front Sawtooth, Back Sawtooth
- Complies with ASTM, ISO, and User-defined
- Auto-alignment: Automatically aligns captured waveforms and setting waveforms
- Examination: Automatically compares captured waveforms and setting waveforms
- Display: Conformability of captured waveforms and setting waveforms

FILTER

- Filtering mode: Low filtering and high filtering; can be used simultaneously.
- Filtering features: Each channel can use different filtering parameter
- Low filtering parameters: No filter; cut off frequency setting; automatic filtering rate setting
- High filtering parameters: No filter; filtering

TEST PROJECT MANAGEMENT

- Create a new test file
- Open a test file
- “Save” a test file or “save as” a test file
- Change a password
- Set up examining documents
- Project documents area

SYSTEM SPECIFICATIONS	
Number of Input Channel	Up To 16-Channels Simultaneously
Voltage Range	10V Peak Voltage
Measuring Range	0.1V, 1V, 10V
Filtering	Each Channel Stand-Alone Analogical Anti-Aliasing Filtering and 160dB/OCT Digital Filtering
Resolution	16-Bit Analog-to-Digital Converter (ADC)
Sampling Frequency	1,024 kHz
Coupled Mode	AC Double-Ended, DC Double-Ended, ICP
Signal Conditioning	Built-In Programmable Amplifier, ICP Constant Flow Source

L.A.B Equipment, Inc. 1549 Ardmore Avenue, Itasca, Illinois 60143, USA Phone: 630.595.4288 Fax: 630.595.5196 www.labequipment.com

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