

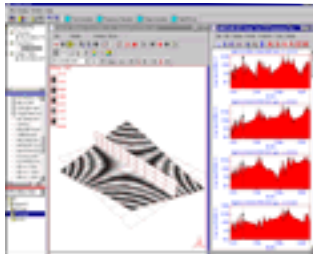
THE MANUFACTURERS

Spektra Vibration & Acoustics Systems Engineering.
It is the experience of the SPEKTRA staff in the development, manufacture and sale of electronic measuring instrumentation, on the one hand, and utilization of these techniques in providing special services for metrological and industrial applications, on the other, that have made it possible for SPEKTRA to gain a top position internationally in an interesting, fast growing market.

Data Physics designs & manufactures powerful instruments for Dynamic Signal Analysis, Closed Loop Vibration Control, electro- dynamic shakers, amplifiers software.



Vibrant Technology designs and produces advanced ODS & Modal analysis software.



DYTRAN Instruments Manufactures quality cables, accelerometers, pressure sensors, force sensors, Impact Hammers, Electronics.

BSWA Tech offers Type 1 & 2 measuring microphones, Impedance Tubes, Tapping machines, Sound Sources, Sound Level meters, DAQ h/w & s/w & accessories

KINGDOM Pty Ltd is a specialist in technical and scientific software, systems and instruments including vibration & acoustic analysers, vibration shakers & shaker controllers and a supplier of associated equipment such as modal analysers, sensors, accelerometers, microphones and including support and training.

INVITATION & How to Register:

Please join us for a session of training, learning & exposure.

To register, email your, **Organisation, Name, Postal Address and Telephone** details of attendees to
vibration@a1.com.au or
Phone: 02 9975 3272.

THE SEMINAR

This free seminar is the Australia, New Zealand & SEAsia Launch of a new KINGDOM Pty Ltd distributorship for Spektra Vibration & Acoustics Systems Engineering, specialists in Calibration Equipment and APS Long Stroke shakers.

AGENDA..... Proposed

The seminar will be conducted as a Morning & Afternoon session suited to theoretical and practical methods.

Morning ... Theoretical Session.

Calibration – Acoustics, Acceleration, dynamic Force

8:00 Registration

8:30 Introduction: • Spektra Vibration & Acoustic Engineering

8:45 • Kingdom Pty Ltd Products & Services

9:00 **Calibration overview and Methods.** Basics, equipment, general coverage & background.

- The 'calibration pyramid'
 - Traceability from National Metrology Institute to final customer
- Primary Calibration, Secondary Calibration? What is that?
- Calibration Equipment: How, with What, How often

10:20 Coffee and Tea

10:40 Practical examples and experiences

- **Accelerometer Calibration** – From standard ranges to extremes
Challenges at low frequencies (down to 0.1Hz) and high frequencies (20 kHz or more)
- **Dynamic Force Calibration** – Entering new ground
- **Acoustic Microphone Calibration** – from audible frequencies (31.5 Hz to 20 kHz) to the subsonic range 0.2 Hz to 31.5 Hz

12:30 Light lunch

Afternoon ...Practical Session

APS Long Stroke Shakers for excitation, Vibration & Modal Analysis of bridges, buildings & Structures.

13:15 Data Physics ACE-QUATTRO Portable, Powerful, Precise dynamic signal analyser

13:30 AutoPower Spectrum analysis, Recording & Playback analysis, Transfer function measurement

14:15 APS Long Stroke shakers, modal testing buildings, bridges etc

15:15 Coffee & Tea

15:30 Structural Testing incl Impact & Shaker excitation. Transfer or Transmissibility Function,

15:50 Modal Analysis. Create wire frame, link points to wire frame. Create ODS & animate, evolve Modal Analysis.

16:45 Interesting case studies: Christchurch Earth Quake, Wind Turbine, Listen to fruit, better Sleep Apnoea, design a better peddle harp, measure power pole health, monitoring recirculating nuclear water, measure power transformer's health.

Most items will use practical testing with appropriate equipment.

17:00 Q&A and close.

SPEKTRA-Dresden & KINGDOM PTY LTD

Present

A Training & Product Launch Seminar on
Advanced Calibration Methods &
Vibration Excitation as applied to
Buildings, Bridges & Other Structures.

- Primary & Secondary Calibration methods & equipment for Vibration, Acoustics & Dynamics.
- Dynamic Signal Analysis for Power Spectrum & Transfer Function.
- Transfer Function as a prelude to ODS & Modal Analysis for Structural Testing.
- ODS & Modal Testing & Analysis.

Adelaide Sept 15th
Melbourne Sept 19th



A free Occasional Seminar presented by:

