

KT Sound & Haptics Explorer

konrad
... technologies ...



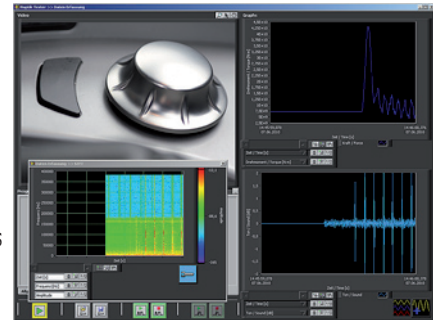
Description:

With the KT Sound & Haptics Explorer Konrad Technologies offers a standard solution for haptic and acoustic test of automotive interior parts, switches and controls for a pleasant operational use of your products.

The system allows you to acquire all signals in a hardware synchronized manner and offers you to test your controls regarding their tactile behaviour using a Zwick torsion, tensile and compression machine.

Applications:

- Switch measurements
- Characterization of switches and dials in the lab
- Fatigue test of controls
- End-of-Line-Test of switches in manufacturing
- Automotive, consumer electronics, aerospace products
- Synchronous acquisition and analysis of length, force, angle, torque and audio signals
- Additional data acquisition via digital I/O, CAN, LIN, ...



Technical Data:

- Acquisition of audio signals up to 102,4 kS/s per channel with 24 bit resolution
- Capturing of force and length signals synchronously

Audio Analysis:

- Synchronous measurement of multiple channels
- Frequency analysis
- ANSI-IEC compliant octave analysis (1/3, 1/6, 1/12, 1/24)
- Psycho acoustics (loudness, roughness, sharpness)

- Limit Test (force, torque, audio)
- Transient analysis
- Weighting (min / max values, envelopes)



Software:

Konrad Technologies Sound & Haptic Explorer	Application software
National Instruments LabVIEW	Sound & Vibration Toolkit
National Instruments DIAdem	Result documentation
Data export:	Excel, DIAdem
Optional:	Test Step Library for National Instruments TestStand

Hardware:

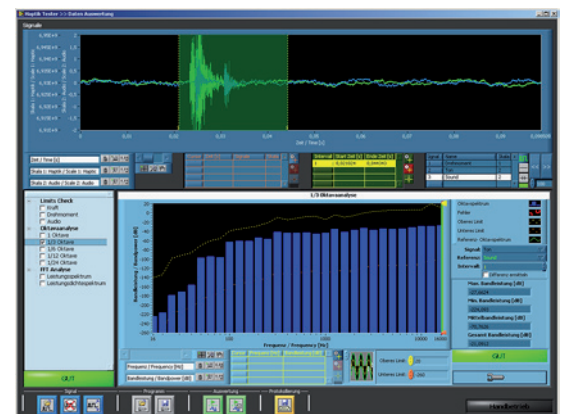
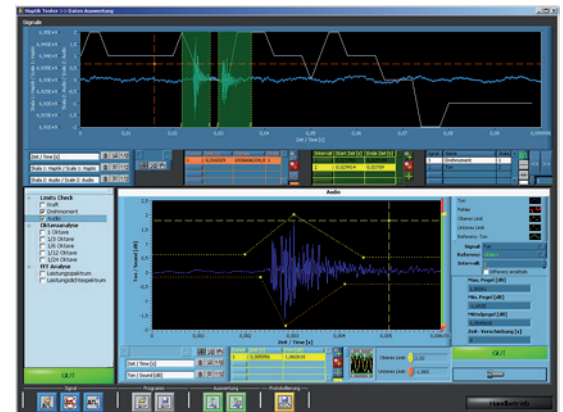
Zwick torsion, tensile and compression:	Forces up to 2,5 kN Torque up to 5 Nm
Data acquisition:	National Instruments dynamic DAQ board PCI/PXI-4474 4 channels 24 bit resolution 110dB dynamic range 102,4 kS/s sampling rate (simultaneous)
Optional:	CAN interface LIN interface Digital I/O board

Summary:

The KT Sound & Haptics Explorer allows manufacturers of automotive interior parts like switches and other controls as well as car makers a cost effective test solution regarding the haptics and acoustic behaviour.

The time-synchronous acquisition of force, length and audio signals, together with digital signals allow the user an in depth analysis of their products. The application friendly software can be used in the lab for product qualification and in the factory floor and can be integrated in the automated test management environment NI TestStand.

For result documentation and additional signal analysis, the system offers an interface to Excel and to NI DIAdem.



Automotive +++ Avionics +++ Semiconductors +++ Telecommunication +++ Medical +++ Industrial