

Welcome to the September issue of our monthly Newsletter, which provides a round up of the latest news, products and courses from Brüel & Kjær UK.

If you would like further information about any of the features in this newsletter, please contact ukinfo@bksv.com

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Get the latest news - follow us on Twitter [@BruelKjaerUK](https://twitter.com/BruelKjaerUK)

Adobe Reader required to view newsletter
[Download here](#)

Company News:

LDS Test & Measurement Ltd becomes Bruel & Kjaer VTS

LDS Test and Measurement Limited - the long established manufacturer of world-leading LDS vibration test equipment - has changed its name to Bruel & Kjaer VTS Limited.

In December 2008 the Royston-based LDS group was acquired by FTSE 250 company, Spectris plc and became a part of Bruel & Kjaer Sound & Vibration, one of Spectris plc's Test & Measurement business units.

Vice President of the Vibration Testing Systems (VTS) business unit, Dr Lawrence Grasty (*See right*) said:

“The change in name for the company signifies the final step to fully integrate the LDS business within Bruel & Kjaer and reflect the one company, one team approach that we are bringing to our customers. The globally recognised LDS brand name continues on all our shaker products.”

LDS vibration testing equipment sits alongside the full range of sound and vibration measurement products and environmental monitoring systems offered by Bruel & Kjaer Sound & Vibration.

This enables the company to offer complete vibration, acoustic, data acquisition and analysis solutions to its customers.

[Read more about Brüel & Kjær VTS products](#)



Environmental:

Charles Greene – a familiar face returns!



After four years working as Environmental Market manager for Brüel & Kjær in Denmark, Charles Greene is back on British soil.

Charles was previously a key member of Bruel & Kjaer UK's team between 2001 and 2007.

Upon his return, on 1st October, Charles will be responsible for introducing our wide range of products, solutions and services to organisations and individuals throughout London and the south east of England.

With his extensive knowledge and experience of environmental noise and vibration measurement there is a lot that Charles can offer to help you solve your noise or vibration problem, so don't hesitate to get in contact.

Contact Charles on: **+44 (0)1763 255 780** or email: charles.greene@bksv.com

HATS Takes A Trip

Brüel & Kjær's Head and Torso System (HATS) took a trip to ESSO's Fawley site earlier this month, to take part in one of the company's family fun day games.

Visitors were able to check the sound levels produced by their personal stereos using the special mannequin attached to a sound level meter (*See right*).

The HATS equipment consists of a dummy with built-in ear and mouth simulators.

These provide a realistic replica of an average, adult human head and torso for testing out external acoustic effects from headsets, microphones, headphones, hearing aids, audio conference devices and hearing protectors.



[Read more about HATS](#)

Sound Level Meters journey through time – IOA Meeting Report



Attendees to the Institute of Acoustics (IOA) North-west branch meeting went on a trip through time, via a presentation detailing the evolution of sound level meters.

Presented by Brüel & Kjær's technical engineer, Keith Vickers, it highlighted the changes this instrument has gone through during the past half century.

[Read the full report in IOA Acoustic Bulletin here](#)

Industrial:

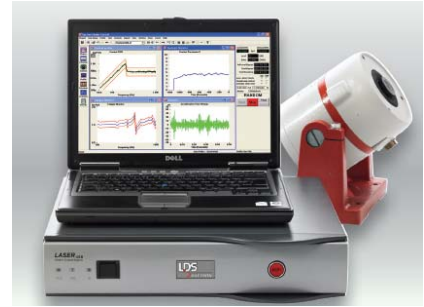
Do you have an old LDS Controller...?

Take advantage of our Controller trade-in offer* by trading your old:

- ✓ **LASER-PCI**

or

- ✓ **COMET-PCI** vibration controller



When upgrading to a brand new **LASER_{USB}** or **COMET_{USB}** controller you purchase the new hardware – but the trade in offer means you only pay 50% of the price of replicating your existing software (applications and enabled channels).

PCI controllers have been obsolete for many years and are no longer fully supported - so this is an ideal time to consider an upgrade. Replacing your old controller becomes a very affordable proposition once you take into account the available trade-in credit!

LASER_{USB} brings vibration testing into the new era of USB 2.0 connectivity.

Combining convenience, performance, flexibility and safety, Laser_{USB} is the ideal controller for your test lab. It has 24-bit precision with wide control dynamic range and fast loop times to provide superb control for your most challenging tests.

LASER_{USB} is also a very flexible answer to your test needs, with the full compliment of control and analysis software applications available for: random, swept sine, resonance dwell, classical shock, sine on random, random on random, shock SRS, and field data replication.

COMET_{USB} on the other hand offers an economical alternative to your vibration test requirements, again utilising USB 2.0 connectivity.

Providing high performance at a very affordable price, the **COMET_{USB}** Vibration Controller is an ideal solution to the everyday demands of your shock and vibration testing.



With easy to use software, together with extensive automation features it a perfect fit for vibration stress screening and production test applications where only random, swept sine or classical shock tests are required.

For a quote or more information please contact: scott.blake@bksv.com or call: **+44 (0) 7884 266 438**

**This offer is valid until 31st December 2011*

NEW Software: PULSE 16 - Fastest, most powerful analyser available

PULSE Array Acoustics Suite

A new calculation option called Refined Beamforming improves the spatial resolution of noise maps by up to a factor of three when used in measurement scenarios such as wind tunnels, on wind turbines and trains.



Array Acoustics options

PULSE Sound Power

Updated with the latest required standards (ISO 3744 and IEC 60704-2-4) ensuring that manufacturers of items, such as washing machines, are able to perform measurements required for the new EU Energy Labelling Directive.



Sound Power standards

PULSE Exterior Sound Simulator

A new module for the Desktop Noise, Vibration and Harshness (NVH) Simulator suite used for auralising Exterior vehicle sounds that would be experienced by a pedestrian.

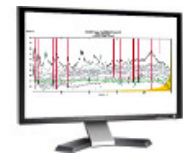


Useful for design and evaluation of sounds from Quiet Vehicles (Electric, Hybrid, REEV) and tuning exterior sound quality of internal combustion engine vehicles.

Exterior Sound Simulator

Operational Modal Analysis

New Surface-to-Surface Intersection (SSI) algorithms significantly improve calculation speed and minimise project sizes in PULSE Operational Modal Analysis.



A new batch processing option makes it possible to perform SSI analysis on a large number of time data without user interaction.

Operational Modal Analysis

[Read more about PULSE 16](#)

Brüel & Kjær's latest M1 news mail, for contract customers, is now available.

Receive a copy of the full newsletter, please contact: heather.wilkins@bksv.com

This issue include:

Introducing PULSE 16

We focused on ease-of-use and performance when developing PULSE 16.



New features include:

- Analysis Engine capabilities for high performance
- PULSE Time Data Recorder allowing measurement on an unlimited number of channels
- Unlimited measurement capabilities in PULSE LabShop
- An unlimited Hardware Driver at no extra cost

[Read more about PULSE 16](#)

Join us for a webinar introducing the new features of PULSE 16 on **25 October 2011**:

[Sign up for the PULSE 16 webinar](#)

Exclusive offers for M1 agreement holders *

- Add PULSE Reflex Modal Analysis Software to your current software for up to a **25% discount**
- Receive up to **40% discount** on PULSE Reflex Modal Analysis when you trade in your current modal analysis software

Beta Test update

Beta Test customers have been trialling a huge number of user scenarios to ensure the quality of the PULSE 16 release.

[Read more about customer help to improve PULSE 16](#)

IAE Division of DCTA - Operational Modal Analysis on a Helicopter

The Brazilian Air Force, through the IAE division of its Department of Aerospace Science and Technology, use PULSE to test modifications on one of its helicopters.



[Read full Brazilian Air Force case study](#)

Economical acoustical array

Noise source identification with array acoustics is more economical for PULSE users, with a complete 18-channel array system, and Beamforming Type 8608.

[Noise Source Identification with acoustical array](#)

**Offers valid until 1 July 2012*

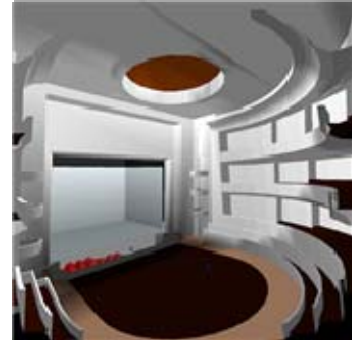
Transducers & Conditioning:

ODEON 11: Flexible, comprehensive, fast

More flexible, more comprehensive and faster than ever: ODEON 11 is an exciting new release of the room acoustic prediction software that will change your daily modelling routines.

Increased calculation speed

Your calculations can now be executed twice as fast, with the introduction of a new ray-radiation pattern based on the Fibonacci spiral. This provides the same calculation precision with half the number of rays.



ODEON 11 has multi-core support, allowing multiple grid calculation points to be processed simultaneously, as the more cores available, the faster you can perform calculations.

With a quad-core processor - for example - grid processing will speed up by a factor five. Combined with the new ray-tracing technique job calculations are 10 times faster than they used to be.

Customise calculation and display parameters

You can now specify the parameters to be calculated and displayed for a certain project. Preferences can be saved in user-defined templates. ODEON 11 combines this with a new, general way of defining room acoustic parameters, enabling expansion of the default set of parameters. In case the exact parameter you need is not available, you can simply go ahead and define it yourself.

Detect and solve echo problems at design time

To help detect and solve echo problems during the design phase, ODEON 11 introduces a new criterion according to Dietsch & Kraak (1986). When evaluating single point responses, the Dietsch Echo Curve indicates the occurrence of echoes, plotting the echo strength over time. The larger the value, the more the audience will notice echoes and possibly be affected by them.

The echo strength can also be mapped to indicate where echoes are perceivable in an auditorium - and to what degree the listening experience may be disturbed by them.

[Read more about ODEON Room Acoustics](#)

Brüel & Kjær Service Centre:

Improved FAQ Section

Brüel & Kjær's improved website FAQ section now contains approximately 300 Frequently Asked Questions about a wide range of acoustic and noise related tools, including:

- ✓ Sound Level Meters
- ✓ Vibration Control Systems
- ✓ Environmental Noise and Vibration products

Visitors select the product area they are seeking information on and use drop down menus to produce search results (*See below*):

Frequently Asked Questions

Frequently asked questions about sound level meters, including software, vibration control systems and environmental noise and vibration products.

To see which type numbers are covered by the FAQs, please refer to the type number drop-down list.

Please use the filters and/or free text search to create a list of questions and answers relevant to your problems.

Product area	<input type="checkbox"/> Calibrations	Type number	<input type="text" value="Any"/>
	<input type="checkbox"/> Telecom/ Audio systems	Problem Type	<input type="text" value="Any"/>
	<input type="checkbox"/> Transducers	Free text	<input type="text"/>
	<input type="checkbox"/> Urban NMT		
	<input type="checkbox"/> Urban Noise Prediction Software		
	<input type="checkbox"/> Sound Level Meters		
	<input type="checkbox"/> Sound Level Meter Software		
	<input type="checkbox"/> Vibration Control System		
	<input type="checkbox"/> Environmental Software		
	<input type="checkbox"/> Dosimeter		

SEARCH

For more information, please visit the Support section of our website:
[Brüel & Kjær FAQ Section](#)

Training & Courses:

Bruel & Kjaer UK's Training Courses & Webinars 2011

Bruel & Kjaer UK's **2011 Training Course Calendar** is available to download via our website, please [Click Here](#)

Bruel & Kjaer UK Courses 2011:

Theory & Practice of Noise Measurement
- 12th & 13th October

[Register Now](#)

PULSE User Training - 19th & 20th
October

[Register Now](#)

Bruel & Kjaer UK FREE Interactive Training Sessions

Take advantage of free online training with Bruel and Kjaer UK's expert engineers by signing up for our one-hour web-based courses:

MATRON - 6th October

[Register Now](#)

2250 User Basic - 20th October

[Register Now](#)

2250 User Advanced - 27th October

[Register Now](#)

MATRON - 3rd November

[Register Now](#)

2250 User Basic - 17th November

[Register Now](#)

2250 User Advanced - 24th November

[Register Now](#)

MATRON - 1st December

[Register Now](#)



Vibration Testing for Engineers and Technicians

This two day course provides a practical introduction to the subject of vibration testing. Designed around the needs of engineers new to the subject of vibration testing and yet offering a useful refresher course for the more experienced user, this course explains how to interpret vibration test specifications and apply them to a vibration test system.



Subjects covered are sinusoidal vibration, random vibration, and shock/bump testing together with a background to the equipment required for each type of test, methods of control and simple fixturing.

The course emphasises the practical aspects of vibration testing - the realities, the problems encountered and the common mistakes which can be made.

The course removes the mystery and mystique of vibration testing and replaces it with facts and common sense.

Vibration Testing - 29th & 30th November
[Register Now](#)

Vibration hands on practical course and test simulation

An optional 3rd day is available which covers the LDS Laser usb Controller for sine, random, shock and mixed mode testing and continues a more in depth hands on for the student. Tests will be run on an LDS V830 to provide each student with confidence for a realistic setup of an air cooled system.

Day 3 is 90% practical and puts into practice the lessons learnt on days 1 and 2, including all project parameters, error messages and control methods whilst observing resonance and Limit control on a test piece.

Bring along your specifications and requirements.

The 3rd day will be restricted to a maximum of 6 customers to allow all students some test time. (Only available at Royston UK company Headquarters)

Practical Vibration Testing - 1st December
[Register Now](#)

Bespoke Training

LDS also offers bespoke, onsite training courses for customers.

For further details on these specialised courses, please contact:
trevor.harrison@bksv.com

[See all Vibration Training dates here](#)

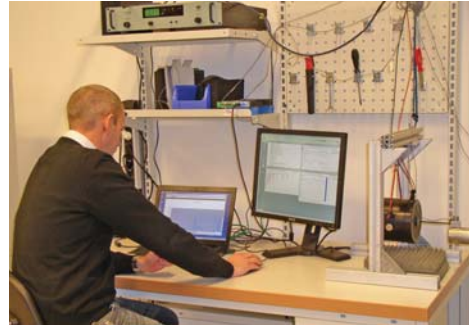
Global product & service information:

Flexible Cable and Pipe Sealing Solutions – Roxtec Case Study

Roxtec is a privately owned Swedish company that develops, manufactures and sells complete sealing solutions for cables and pipes.

The Roxtec sealing system is based on Roxylon™ rubber modules with removable layers that enable a perfect fit for cables and pipes of different sizes.

A Brüel & Kjær PULSE LAN-XI system is used for internal R&D purposes, where Roxtec validates its existing seals and makes experimental tests on rubber.



*The system in use at Roxtec's test facility
(Photo courtesy of Roxtec)*

The portable LAN-XI and battery module also make the system perfect for on-site visits to customers where data from the customer's current cable and pipe installations can be gathered for troubleshooting or for making recommendations.

Where cables and metal or plastic pipes pass through openings, it is essential that no fire, gas, water, dust, dirt, insects, snakes or rats are allowed to penetrate. Some installations must also withstand corrosion, pressure differences, vibration and electromagnetic disturbance. Practicality and convenience also play their part. So the challenges are plentiful when it comes to the choice of seals.

The Roxtec sealing system is based on Roxylon™ rubber modules with removable layers that enable a perfect fit for cables and pipes of different sizes. The seals consist of these modules, a compression unit and a housing frame, smartly developed to attach to the opening through which the cables, metal or plastic pipes are routed.

In this way, the common cable and pipe diameter range is handled with just six basic sizes of modules. And should there be design changes or other alterations, the flexible Roxtec seals can be reopened and closed again, for example, when exchanging cables and pipes or adding new ones. The raw material for making the sealing system is provided by a supplier according to Roxtec's specifications who then process it themselves.

Roxtec experiments a lot with different mixes and types of rubber and creates a lot of prototypes. The materials used are often tailor-made for customers. Roxtec's sealing solutions are used by some of the most demanding industries, including Marine, Oil & Gas, Telecom, OEM, Power and Construction. The products are used on land, at sea and underground.

[Read full Roxtec Case Study](#)

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