



Castle Instruments

A wide range of instrumentation for Health and Safety and Environmental Professionals

- Noise at Work
- Human Vibration
- Environmental Noise & Vibration
- Air Sampling for COSHH
- Gas Detection
- Indoor & Outdoor Air Quality
- Temperature, Light, Air Velocity & much more.....



Experts in Health & Safety legislation

As leading experts in our field of technical health and safety, we can offer you advice and support giving you comfort in the knowledge that you are dealing with compliance in the best way possible.



Simple to use instruments



4 year warranty



Try before you buy



Technical support



After sales care



GA2002 Kit

For full product listings, specifications & ordering

Telephone:
+44 (0)1723 584250
or visit:
www.castlegroup.co.uk

Vibration Solutions for the Workplace

These are just a few examples of our extensive product portfolio!

Industrial application & component monitoring

GA2002 POCKET VIBRATION METER

The GA2002 is the perfect little meter for industrial monitoring applications, from bearings to blades, surfaces to shafts - it's robust construction and measurement competence is hard to beat. Suitable for many other general applications.



- Improved efficiency of measurements
- Reduced down-time with scheduled maintenance
- Acceleration, Velocity and Displacement
- 3 Frequency filters
- 9-point simple data-logging
- Simple to use
- Clear 8-character LCD display

Power tool vibration measurement & assessment

GA2003 HAND-ARM VIBRATION RISK INDICATOR

The GA2003 comes complete with all the accessories you need for Hand-Arm Vibration measurements. Simple to use and very robust. Great price!

- Assist with legal compliance • Protect employees health
- Small and Lightweight • Tough and Simple to use
- Hand Arm Vibration Filter • 9-point data-logging
- Acceleration and Velocity Measurements
- Accessories included



GA2003 Meter

Reduces measurement errors!

PNEUMATIC & ELECTRIC TOOL-TIMERS

Castle Tool-timers are an essential companion to any Hand-Arm Vibration Meter as they measure the actual trigger time of an operator on a particular tool. This is commonly the part of the measurement process that leads to the biggest errors.

- Instantaneous measurement of trigger time
- Improved accuracy of Hand-Arm Vibration Exposure
- Available in pneumatic or electric versions
- Various voltage versions
- Highly robust design
- Key operated for security of measurements
- Standard industry fittings



Pneumatic Tool Timer

Professional Safety Vibration Systems

Dedicated hand-arm & whole-body measurements

GA2005 PRO-DX EXCIEO
PROFESSIONAL SAFETY SYSTEMS

Excieo systems cater for Hand-Arm and/or Whole-Body Vibration requirements as well as Environmental applications. This instrument uses the latest technology to give you the fastest route to compliance with the Control of Vibration at Work Regulations 2005. Dedicated modes for Hand-Arm and Whole-Body measurements mean that mistakes are almost impossible!



Pro-DX
Excieo
System

- Comply with Control of Vibration at Work Regulations 2005
- All the answers in simple-to-use software
- High quality evidence for court cases • Fast USB data transfer to PC
- Multiple frequency filters • Large advanced data logging
- Parallel triaxial measurement • Minimal instruction operation
- Special modes for hand-arm & whole-body measurements
- Input of employee names & tool information
- Custom mode for multiple applications
- Compliant with ISO 8041:2005 • Updatable software upgrades
- Electroluminescent back lit LCD display

Application notes

Not only to comply with the Control of Vibration at Work Regulations 2005, but to have any chance of beating the litigation, it is essential to take high quality Vibration measurements. When taking Hand-Arm Vibration measurements, it is critical that the pick-up (accelerometer) is rigidly attached to the surface of the tool, preferably using jubilee clips. A sample measurement is then made (as acceleration in m/s/s), which must be 'representative' of the entire process and from that, a daily exposure figure can be derived - this is called the A(8) and is normalised to an 8 hour working day. Whole-Body Vibration works in much the same way although a 'seat-pad' accelerometer is used which usually sits between the employee and the seat.



Log onto...

cassafe.com

Essential products for Health, Safety & Environmental applications, from Anemometers for wind speed, to Personal Protection Equipment and everything in-between.

- Temperature and Humidity
- Air Velocity
- Light Meters
- Gas Detection & Air Sampling
- Moisture Meters
- Water Quality measurement
- PPE (Personal Protective Equipment)
- Health and Safety Publications, CD's and DVD's

...and much much more: everything for Health, Safety and Environment applications www.cassafe.com

Noise & Sound Exposure Measurement Systems

These are just a few examples of our extensive product portfolio! for full product listings, specifications & ordering Tel: +44 (0)1723 584250 or visit www.castlegroup.co.uk

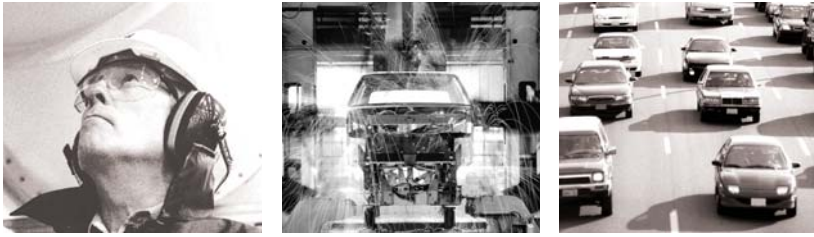
Provides all your information in just one reading

GA131 PRO-DX VOCIS – PROFESSIONAL SAFETY SYSTEMS

The Control of Noise at Work Regulations 2005 requires detailed assessment of the noise exposure of employees. The Vocis is designed with this in mind and can provide all the information you could possibly need in one measurement - no repeating the process. The systems come complete with software or a portable printer.

The best way to keep you compliant with legislation.

- Comply with the Control of Noise at Work Regulations 2005
- High quality evidence for court cases • Combat Legislation and Litigation
- Optional Real-time 1/1 & 1/3 octaves • All digital filters & frequency analysis (DSP)
- Alpha-numeric data input • User friendly interface
- Class 1 & 2 to IEC 61672:2002, Filters to IEC 61260:1995
- Weatherproof & dustproof • Back lit LCD display • RS232 interface for PC connection
- DAT compatible • Up to 512MB of internal memory • Fully upgradable & future-proof



KV001 Kit

Competence & value

POCKET SOUND LEVEL METER SYSTEMS

The Castle pocket meters have always been a work-horse range in the field of Noise at Work and now, with the Control of Noise at Work Regulations 2005, they are particularly important. Available as Class 1 or Class 2, they will provide you with competent measurement that will stand up to scrutiny. Ultimately simple to use and made to the highest standard, they are unbeatable for specification and value!

The system comes with a calibrator and (optionally) a dosimeter.

- Perfect for Legislative compliance • Available as Class 1 or Class 2 (GA113 or GA215)
- Systems complete with calibrator and kit case • Simultaneous Leq and CPeak for time-saving measurements
- Also give Lep'd, Lmax, Le and running time • GA113 will convert to a dosimeter for dual-function use
- Tough design and clear display • System available with or without a dosimeter



NK006 Kit



Automatic Hearing Protection Selection

The selection of hearing protection is required by the Control of Noise at Work Regulations 2005, to optimise the effects to hearing protection; whilst minimising the problems with over protection, which can mask warning signals and cause isolation. The Castle Vocis sound level meter will measure the octave band levels and automatically calculate the effect of applying a selected protector from an inbuilt database of protection data.

Ideal for people on the move!

POCKET DOSEMETERS

For mobile employees, maintenance staff or unknown work patterns, dosimeters are the perfect solution. They can also be used for integrity checking of other measurements. The Castle Pocket Dosimeters are an excellent way to perform these tasks and are available with data-logging (GA156) or without (GA256).

- Comply with Control of Noise at Work Regulations 2005 • One-button operation
- 'Unbreakable' pocket-clip • Direct read-out of all parameters • Projected Lep'd and DOSE readings
- Data-logging and PC download (GA156) • Available stand-alone or in most Castle Systems

Great for basic sound level readings

GA824 SMART SENSOR SOUND LEVEL INDICATOR

A low cost solution for measuring basic sound levels eg, alarm testing, home cinema systems.

- Large clear digital display • AC, DC output • Supplied with carry case & windshield
- FAST, SLOW time weightings • A, C frequency weightings • MAX hold function



Noise Activated Warning Systems

The Control of Noise at Work Regulations 2005 requires noise control zones to identify when employees **MUST** wear hearing protection. This works if the noise is constant or if people are always in the same place. This, however, is **NOT** often the case. The noise activated products from Castle overcome these problems by making the alerts relevant and personal.

Intermittent noise levels?

GA902 NOISE ACTIVATED WARNING SIGN SYSTEM

- Creates 'Noise Zone' only when there's Noise! • Bright illuminated display
- 45cm x 19cm Display area • User-set trigger level • Blank when off
- System includes flashing beacon • 230V or 110V versions available



Perfect for mobile employees

dbAlert PERSONAL NOISE ACTIVATED WARNING UNIT

- Comply with the Regulations • Small and light
- Personal warning to wear hearing protection
- Vibration and visual alert • Tough pocket clip



Audiometric testing for Health Surveillance

Health Surveillance for employees exposed to noise is now a requirement under the Control of Noise at Work Regulations 2005. Health surveillance requires the use of an audiometry system and this is where Castle's Excalibur system and optional audiometric booth will add real strength to your Hearing Conservation Programme.

Designed for power & portability

GA1001 EXCALIBUR AUDIOMETER

This PC based Audiometer uses the power of a PC for file handling and data storage so that test results can be easily stored, manipulated, sorted and analysed. The software will even print appointment reminders for employees and Doctor's letters for referrals.

- PC based power for data handling • Windows software for familiar operation • Unlimited file storage
- Colour display of audiograms • Print to your standard PC printer • Merge data with standard letters

High quality & reliable results

GA1100 AUDIOMETRIC BOOTH

- Allows for compliant test results • High acoustic performance • Castor mounted for manoeuvrability
- Large Window • Fits through standard door • Supplied ready-made



Air Sampling; Protection from Hazardous Substances

The Control of Substances Hazardous to Health (COSHH) Regulations 2002 requires risk assessment and control where employees are potentially exposed to dangerous substances. Castle supply a range of competent, robust equipment designed specifically for the task.



Calibration Application notes

Every air sampling task requires calibration in the set up of the equipment. This must be conducted with the sampling media in place to ensure the correct air-flow. For Dust sampling this can simply be achieved with a rotameter, which is a simple, manual device for high-flow rate calibrations. Gas or vapour sampling, however, is not so straightforward using lower-flow rates. For this type of calibration, a bubble-film calibrator or an automatic calibrator must be used.



Application notes

Complying with the Control of Substances Hazardous to Health (COSHH) Regulations 2002 does not have to be difficult and can certainly be tackled in-house following some training and a minimal investment in equipment. Picking the right sampling equipment, setting it up and arranging for analysis can be straight forward and all the advice you need is only a phone call away. There are also full application sheets available to help.

The industry favourite for reliability!

SIDEKICK AIR SAMPLING SYSTEMS

The Sidekick pump is an industry favourite due to a proven track record and unrivalled reliability. It allows for Dust sampling onto a filter at higher flow rates and tube sampling at lower flow rates for gas and vapour analysis. Kits are available for Dust or Dust and Vapour sampling and there are versions with or without full ATEX approval and timers.

- Comply with Control of Substances Hazardous to Health (COSHH) Regulations 2002
- Dust and Gas/Vapour sampling • Full ATEX approval • Timer available for sampling time
- 'Tamper Cover' to prevent accidental operation • 3 - 5000 millilitres per minute range
- up to 500 millilitres per minute for vapour sampling



Sidekick System

Ideal for multiple application use

AIRCHECK PUMP SYSTEMS

For more diverse or demanding applications requiring flexibility of the sampling equipment, the Aircheck offers a large range of flow-rates, a greater level of control and more displayed information. Users who have a wider range of problems will therefore benefit from always having the right pump.

- Large range of 5 - 3000 ml/min
- Compensated flow to $\pm 5\%$
- Programming via PC
- Reporting back to PC
- 3 button set-up key pad
- Real-time Clock • Ultra-quiet operation
- Kits available as Dust or Dust and Vapour

Premier choice gas & vapour sampling

POCKET PUMP KIT

For use where gas/vapour sampling is all that's required. The small, compact size makes it easily wearable and the complimentary software gives control for programming and analysis of running time and flow rate. Available as EEx approved, the kit comes with tubing, sample tube adapter, power supply and kit case.

- Comply with Control of Substances Hazardous to Health (COSHH) Regulations 2002
- Large, clear LCD display • 3 button control
- Constant flow or constant pressure mode
- Programming through PC
- 20 - 225 millilitres per minute



DC Lite Unit

Increased accuracy, quicker!

DC-LITE AUTOMATIC CALIBRATOR

For conducting dust or gas/vapour sampling, this unit is a primary calibration standard and will cover flow ranges from 10 to 12000 ml/min (other ranges available). The DryCal system in the DC-Lite does away with the need for messy liquids; increases the accuracy and dramatically cuts the time taken.

- Portable for field use • No liquids, no mess • Continuous reading
- Hands free operation • Accuracy better than $\pm 2\%$



COSHH 'Competence' Training Course

The Castle COSHH Competence course provides the knowledge and information with plenty of hands-on, practical experience to leave delegates ready to tackle their workplace COSHH issues.

See our Training brochure or visit www.castle-training.com for further information



Real Time Gas Detection

Under the Control of Substances Hazardous to Health (COSHH) Regulations 2002, it is often imperative to monitor for certain substances or conditions in real time. This requires a very different kind of technology in the guise of gas detectors. Castle offers various well proven instruments that can fulfil this need, offering compliance and peace of mind.

Perfect for where monitoring risk is a necessity!

PERSONAL (SINGLE GAS) MONITORS

GASMAN, GASBADGE AND EX 2000 RANGE OF PERSONAL GAS DETECTORS

Personal, single gas monitors are used in tough environments where there is a particular risk to monitor and where their unobtrusive size is important. Available with ratings up to IP65 and 67, these monitors can monitor for Oxygen, flammable atmospheres and a range of toxic gases providing truly flexible systems.

- Loud, bright and vibrating alarms • Compact for unobtrusive wear-ability
- Clear, large LCD • Simple operation • Multiple levels of alarms
- Average level alarms for toxic gases



Gasbadge

Gasman

EX 2000

Simultaneous hazard detection

FIXED 4 GAS PERSONAL MONITORS - TETRA:3

Where the environment may have mixed hazards or some unknown quantity, a 4-gas monitor allows for simultaneous monitoring of a variety of factors. The Tetra:3 monitors Flammable atmospheres, Oxygen, Hydrogen Sulphide and Carbon Monoxide, covering the 4 most common hazards in industry.

- True single-button operation • Simultaneous display of 4 sensors
- 2 levels of instantaneous alarm • Li-ion battery for >16 hours operation
- 8 hour and 15 minute (COSHH) average alarms
- Water and Dust resistant to IP65 and IP67
- Docking station for charging and PC connection



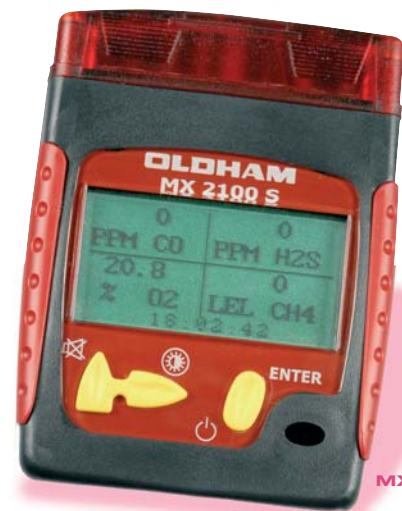
TETRA:3

Perfect for varying environments

MULTI-GAS DETECTORS TETRA AND MX2100 PERSONAL, MULTI-GAS MONITORS

With fully interchangeable, intelligent sensors, this range of gas detectors is perfect for companies with varying environments or changing processes. Suitable for the toughest environments, being shock, dust and waterproof, these detectors will monitor for oxygen, flammable atmospheres and toxic gas detection. Both these instruments are available with an internal pump for gas sampling applications.

- Fully-interchangeable sensors • Loud, bright and vibrating alarms
- Multiple levels of alarms • Average level alarms for toxic gases
- Simultaneous display of 4 or 5 sensors • Long operating times
- Water and Dust resistant to IP65 and IP67



MX 2100



Application notes

Many industries use potentially hazardous substances, which can create a risk to employees; the chemical industry, metalworking, agriculture and manufacturing to name a few. It might also be the case that employees are working in confined spaces like sewers. Gas detection can save lives in many of these cases, providing a proper COSHH assessment has identified the hazards. Advice is available from Castle on selecting the correct equipment.

These are just a few examples of our extensive product portfolio! for full product listings, specifications & ordering Tel: +44 (0)1723 584250 or visit www.castlegroup.co.uk



Instrumental Innovation

At Castle, we pride ourselves on producing competent, innovative instrumentation that is simple to use. Our approach to development is geared entirely around making the user's life easy with logical user interfaces and tailored information. With a selection of sound, technical health, safety & environmental products, Castle's instruments cover a vast range of applications.

Much modern electronic equipment has the ability to communicate with a PC. Castle instruments are no different and we take much care in ensuring that this process is as trouble-free and user-friendly as possible. Downloaded data should also be in a versatile form and we achieve this by allowing results and graphs to be simply 'copied' and 'pasted' into word-processor and spreadsheet programs.

WHO ARE CASTLE?

Castle are world renowned technical health, safety and environmental experts, specialising in Noise, Vibration, Air Sampling and Gas Detection. Offering an array of home produced products and services to provide inclusive solutions to its customers. These include measuring equipment to buy or rent, professional training courses, calibration services and consultancy.

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Castle training courses provide in-depth knowledge and a high level of hands-on practical experience in a range of health, safety and environmental subjects including, noise, vibration, COSHH and audiometry. The courses are tutored by highly experienced professionals and lead to 'competent person' status.

www.castle-training.com



CastleRent has an extensive range of monitoring equipment available for rent including sound level meter kits, vibration meter kits, air sampling kits and gas detectors. Suitable for applications including health and safety, environmental monitoring, construction and engineering, the kits can be rented short or long-term, offering many benefits to the alternative of ownership.

www.castle-rent.com



Castle consultants are available to help you, whatever the problem. For noise and vibration issues, no job is too large or too small and no subject out of reach. The same ethos applies to a raft of other Safety, Health and Environmental issues including COSHH, Air Quality Monitoring, Display Screen Equipment and Manual Handling.

www.castle-consultancy.com



At Castle, our team of highly-trained staff can calibrate equipment covering a vast number of applications. These include noise and vibration, audiometry, temperature, light, air-flow, gas detection, pressure, electrical test and weight and we will help with anything else you need calibrating.

www.castle-care.com

