

H2 Headset Monitor

Do you know what the noise exposure levels of your headset wearers are?

New Control of Noise at Work Regulations came into force in February 2006 - Do you comply?

The Castle H2 Headset Monitor gives the answers



- New European regulations are in force, reducing the 'permitted' noise exposure levels.
- The CWU has won test cases in the High Court for acoustic shock claims. Compensation totalling £142,395 was recovered on behalf of the eight claimants.
- The GMB is calling on employers to identify sources of either high-pitched noise or high background levels and to take measures to reduce noise levels.
- An employer cannot do anything about any of the above without knowledge of current noise levels.
- More important than ever to monitor staff noise exposure levels.
- The new Headset Measurement System from CASTLE measures all required information without disturbance to the headset wearer.

The H2 MONITOR UNIT, is the most comprehensive, non-invasive noise level monitoring unit for wearers of headsets currently available.

The H2 MONITOR UNIT is a small-footprint battery-operated module that accurately measures the noise exposure in the ear from the headset earpiece AND the local ambient noise levels simultaneously.

The H2 MONITOR UNIT can store up to 45 hours worth of continuously-measured noise levels (at 1 minute interval) in its non-volatile memory. When downloaded to a PC, this data allows for the computation of the daily noise exposure in the ear(s) wearing the headset, together with that due to the local environment. These values, along with a history of the noise exposure, give a quick and easy way to see if the headset wearer is being exposed to noise which exceeds the action levels of the Noise at Work Regulations 1989 and the forthcoming regulations as determined by the European Physical Agents Directive [Noise].



HOW IT WORKS:

The CASTLE HEADSET MEASUREMENT SYSTEM comprises two different units –

The H1 HEADSET MEASUREMENT UNIT and the H2 MONITOR UNIT

Each specific make and model of headset is measured on the H1 HEADSET MEASUREMENT UNIT and data about the particular features of the headset recorded in the measurement unit. This data, which is specific to this make and model of headset, regardless of who is wearing it, is transferred to a PC programme called “LOGGER”, which is used to load this data into the H2 MONITOR UNIT before use.

The H2 MONITOR UNIT is then placed on a desk near the headset wearer, and using a special cable assembly, is plugged into the line between the headset connecting socket and the headset cable.

The H2 MONITOR UNIT is then left logging for as long as required, and can be stopped and downloaded back to the PC at any time. All data logged is saved in non-volatile memory in the monitor.

Microsoft © Excel™ is used to store and display the measured data. Results can be archived for later reference and to provide evidence of monitoring and exposure levels if required. Other monitoring and display software is available to suit particular requirements.

Measuring and evaluating the level of noise experienced by wearers of headsets, whether used in call centres, the media or other locations, is not an easy task. Unless special equipment is added to the headset, it is difficult to measure inside the earpiece, and most headset wearers do not want any further equipment added to their normal mode of operation.

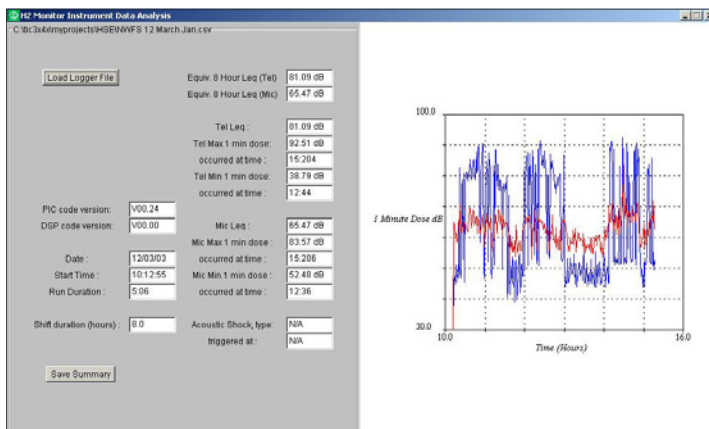
Even if the noise can be measured in the earpiece, there remains a basic difference in the levels measured when compared to the noise limit regulations set in various countries, and in the EU by the Physical Agents (Noise) Directive. Levels measured in a closed space like an earpiece need to be corrected to the levels that would be equivalent in an open space such as most people experience in their working environment, and for which the levels defined in legislation with respect to legal exposure limits are expressed.

Extensive testing by the Health and Safety Laboratory has shown that the results obtained from the H2 monitor are accurate and give the same results as the complex measurements systems previously used by them for measuring in Call Centres.

The H2 monitor unit measures two signals – the one sent to the earpiece of the headset and the noise levels in the immediate vicinity of the headset wearer. This shows how loud both sounds are and can indicate whether high earpiece levels are being used because the wearer is situated in a noisy environment. Each level is recorded for every minute the logger is operational, and the data is downloaded to a computer at the end of each monitoring session, when the daily exposures can be computed and information about the highest levels and durations can be examined.

This will show whether the headset wearer is working at safe levels, approaching the limits or exceeding them. In the UK, from 15 th February 2006, the action levels will be set at 80 dB(A) for first action level, above which monitoring of exposure is required, 85 dB(A) for the second action level, which is the recommended maximum daily exposure, and 87dB(A) as the limit value, all levels to be the 8 hour equivalent-continuous level.

It is probable that most people responsible for the noise exposure of headset wearers have little idea of the exact levels in their ears when the headsets are in use. It is thought that there will be many instances where the daily exposure exceeds 80 dB(A), which in turn will mandate monitoring. The CASTLE H2 monitor can provide all the relevant data, and show whether or not the levels in use do exceed the first action level.



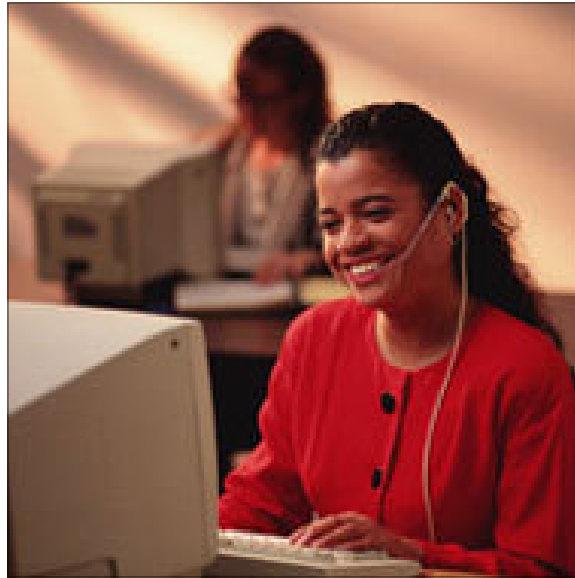
A typical report



A periodic check of all operators using headsets will show whether the levels they experience are above or below the action levels.

This can be done using two different approaches:

- Purchase H2 monitor units from Castle and instigate a programme of monitoring and recording data from each operator
- Call in Castle consultants to measure a sample of operators using the H2 monitor and report on what action is required, if any.



A mixture of the two approaches is obviously possible, and an initial survey by Castle consultants to establish basic information, followed by a purchase of units and a local monitoring programme could be used if found necessary. Castle can provide training in the use of the H2 monitor to anyone as required.

To discuss your needs and tailor them for the most cost-effective solution contact Castle for further details.



To the Safety, Health and Environment Professional...

The issues faced every day by Health, Safety and Environmental professionals are vast and varied. At Castle, we have spent a lot of time developing products and services to make your life easier!

Castle Group Ltd are one of the leading international group specialists in technical safety, health and environment solutions. Whether you are in Industry, Construction, Local Authority or anywhere there are safety or environment issues, we are a resource you really could use. We can help with Noise, Vibration, Air sampling, Gas detection, Light and temperature and just about anything else that needs measuring. The following services show you how we can help

FREE Health & Safety Training Seminars!

To get you off the ground, refresh your knowledge or just to get a taste, Castle is continually running FREE Safety, Health and Environmental seminars around the country. Covering subjects from Noise at Work, to COSHH and Audiology, the list is ever growing, as are the locations. Check out our web site for the next seminar near you.



www.castlegroup.co.uk

Castle Instruments

Dealing with many Safety, Health and Environmental issues may well mean you need access to a plethora of **equipment** and **instrumentation** to carry out measurements and assessments necessary for the job.

At Castle we can provide you with just about any of the equipment you might need. All our equipment comes with the **guarantee** of back-up and support you only get from a company with 40 years under its belt! Here are a few of the core products we can offer, but we can also source anything you may need!

Noise and Vibration Measurement Equipment
Audiometers, Otophoses and Booths
Air-Sampling Pumps, Calibrators and Consumables
Gas-Detection and Personal Monitors
Emissions and Air Quality
Light, Temperature, Humidity and Airflow

www.castlegroup.co.uk



Castle Training Academy

Training is becoming an ever more important area of consideration to industry **professionals** and the Castle Training Academy is fulfilling the need for more and more companies every year. The Academy now offers **competence** training along with IOSH and CIEH **qualifications**. What is more, look out for our NEW City & Guilds provision. All courses come with professional **CPD** points and many are eligible for CITB and Train to Gain **grant funding**.



You can see a full list of courses and book-online on our website.

www.castletrainingacademy.com.

CastleRent

There are a number of **reasons** why rental may be the solution for you. You may only have a one-off use, a special contract, a limited budget or a need for supplementary products. In any case, our **flexible booking** system, next day a.m. delivery and open-pricing mean that you can address any of these issues without delay. For long-term contracts, such as construction projects, Castle Rent is also a **tax efficient** way to 'own' equipment. Finally, for peace of mind, what better way is there to try a product before deciding to buy it? We even give you money back if you do purchase!

The Advantages of Castle Rent;

- Easier on cash-flow
- Rent for long- or short-term as you need it
- Let the Tax Man pay for you!
- Try before you buy
- Four weeks for the price of three
- No on-going maintenance costs
- Sourcing service for any other equipment you need

www.castle-rent.com

Castle Care

Measurement instrumentation must be **regularly** calibrated to a traceable standard and this is certainly true for most health, Safety and Environmental monitoring equipment. At Castle, our team of **highly trained and experienced** technical staff can service and calibrate almost any type of monitoring equipment from Noise and Vibration meters to Thermometers to Scales. The Castle '**Premier Service**' includes menu pricing and a normal turnaround time within 5 days. What is more, we will evaluate any instrument and return it for **FREE** if you do not want to proceed.



Castle premier service and calibration offers...

- Free Evaluation Service
- Clear and Simple Pricing
- UKAS Accreditation Available
- Large range of equipment calibrated
- 4 Levels of calibration available for most equipment
- Annual contract calibrations with up to 20% off

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Castle Contracts

For companies with **multiple** pieces of **equipment**, there is also Castle's 'Contract Calibrations'; an annual scheme to take the hassle out of maintaining equipment certification. Castle will issue calibration **reminders**, collect your equipment if required and return it calibrated as soon as possible. This scheme also affords a **saving** of up to 20% on annual calibration charges.

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Castle Consultancy

Castle **experts** are waiting to help you. Because we have a **network** of consultants across the country, we are poised to **react** to your requirement. Not only can we normally provide a local service, but we can usually help right away if you need us to!

Whether you are limited for time, in need of further **expertise** or just want some **advice**, we can assist. We have provided a wide range of services to many top companies for projects large and small.

Here are some of the services we can provide, but if it's not here, just ask!

- Noise or Vibration risk assessments
- Building Acoustics
- COSHH compliance
- Environmental Impact Assessments
- Air Quality Monitoring
- Occupational Health Screening programmes

www.castle-consultancy.com

Castle Online

You can access all our products and services online whenever you want, just go to www.castlegroup.co.uk and you will find a **knowledgebase** packed full of useful facts and information. You will also find details of all our upcoming **FREE seminars** and training courses as well as product information on literally hundreds of health, safety and environmental items, which are available to purchase directly through a secure server. Among other things you will find:

- HS&E Measurement Products
- Books, Standards and Publications
- HS&E CD's DVD's
- Stopwatches and Timers
- Scales and Distance Measurement
- Water Testers

You will also find our shop on ebay of all places - <http://stores.ebay.co.uk/Castle-Group-Safety> or just go onto ebay and type Castle Group Safety in the shops section.

Who are Castle

For 40 years, Castle has been driving forward with product and service innovation. For a number of the early years, the company focussed on the development of sound and vibration measuring equipment. This was then progressed by adding training courses, rental and consultancy eventually leading to the Castle of today, which is helping many customers deal with a vast range of health, safety and environmental issues in a variety of ways. The future is a very exciting place at Castle and we are working on many new initiatives with our customers firmly in mind!



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