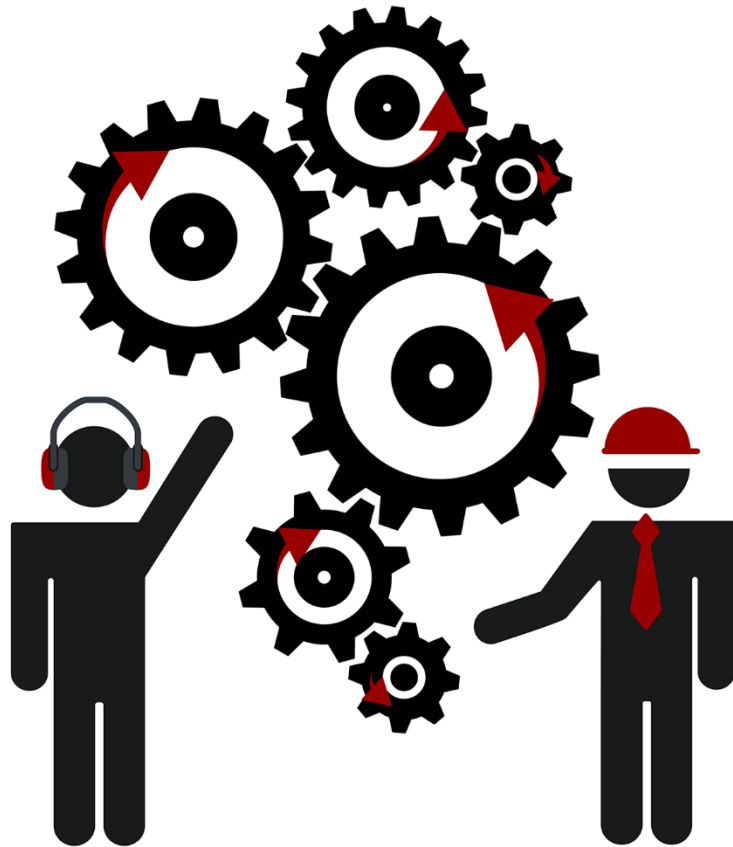


# 5 Biggest Noise at Work Mistakes...

...and how to fix them.



A Free eBook from The Noise Experts



# Getting Started

## Who Is This eBook For?

Are you responsible for health and safety in your workplace? Are you looking to understand a bit more about occupational noise and the best tools for the job? Not sure where to begin? If so, this eBook is perfect for you.



We'll take a high-level overview of The Control of Noise at Work Regulations 2005, highlighting the five biggest mistakes that are made when it comes to controlling occupational noise, and outline how to avoid them.

## What Will You Achieve?

After reading this guide, you will feel more confident about making accurate noise measurements and identifying noise hazards in the workplace. You'll also get some useful hints and tips on the right products to use in your role.

If you any questions, make yourself heard by contacting our Noise Experts.

**Sound good to you? Let's begin >>>**

# Find Your Way Around

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# What Is Noise At Work?

## Preventing Noise-Induced Hearing Loss (NIHL)

In a nutshell, this is why we monitor noise at work. The **Control of Noise at Work Regulations 2005** introduced safety limits for daily noise exposure. It's one of the most overlooked risks in the workplace. But what are the limits?

| Noise Level dB(A) | Safe Duration |
|-------------------|---------------|
| 80                | 8 Hours       |
| 83                | 4 Hours       |
| 86                | 2 Hours       |
| 89                | 1 Hour        |
| 92                | 30 Minutes    |

As you can see, the noisier it gets, the less time you can legally be exposed to that noise level. If these daily limits are exceeded, you dramatically increase the chances of developing NIHL.

To check noise levels, you need accurate noise monitors from an experienced manufacturer like Cirrus Research.

## Did You Know?

Recent statistics released by the Health & Safety Executive revealed the number of people currently claiming **Industrial Injuries Disablement Benefit** scheme (IIDB) for Noise-Induced Hearing Loss.

This doesn't include the 10000s of claims being made by Personal Injury Lawyers. After coining the term "Industrial Deafness" they are now seeking compensation for anyone who has suffered hearing loss due to occupational noise. This is why you need to ensure you're taking the right precautions.

# 18,000

The estimated number of Noise-Induced Hearing Loss cases in the UK last year

**#KnowTheFacts**

**#CirrusOptimus**

# How It Works

## What Are The Action Levels And Limit Values For Noise?

This relates to the levels of noise exposure your employees face over an average working day or week; and the maximum noise (peak sound pressure) employees are exposed to in a working day. The values are:

### Lower Exposure Action Values:

Daily LEP,d or weekly LEP,w exposure of 80 dB;  
Peak sound pressure (LCPeak) of 135 dB

### Upper Exposure Action Values:

Daily LEP,d or weekly LEP,w exposure of 85 dB;  
Peak sound pressure (LCPeak) of 137 dB

**REMEMBER:** A single machine might exceed these levels but as long as the overall noise level over the average working period does not exceed these noise levels, you are within the legal limits.

There are also levels of noise exposure that you must not exceed. These are called exposure limit values:

### Exposure Limit Values:

Daily LEP,d or weekly LEP,w exposure of 87 dB;  
Peak sound pressure of (LCPeak) 140 dB

If your readings exceed any of these values, you must take action to reduce noise in your workplace first before providing hearing protection. Remember, the aim here is to prevent Noise-Induced Hearing Loss.

# Who Are Cirrus Research?

## We Believe In Making Noise Measurement Simple

Ever since we started distributing noise measuring technology in 1970, we have been committed to making life easier for our customers. How do we achieve this? By combining innovative technology and usability. This, together with our 50+ years' experience, has enabled us to create a suite of instruments that are perfect for noise at work measurements. All you have to do is switch on, point and go. It's that simple.

## The Optimus+ Range of Sound Level Meters

Meet our latest generation of sound level meters. The Optimus+ has evolved to measure all applications and parameters, easily.

Whether you need simple noise measurements or detailed noise analysis, the Optimus+ has you covered.

For added peace of mind, the Optimus+ comes with a 15-Year Warranty, so you're always covered.



**Discover more about what the Optimus+ can do for you >>>**

Mistake 1

**Not Doing  
Anything**

# 3 Reasons Why This Is A Mistake

**1**

You could be exposed to high noise levels that are damaging your hearing

Already having difficulty hearing people talk? Does music sound muffled? Ringing in your ears? That's hearing damage.

**2**

You could become liable if your employees develop Noise-Induced Hearing Loss

Personal injury lawyers are actively seeking compensation under "Industrial Deafness" claims. Protect your business from action.

**3**

You are breaking the law.  
*Control of Noise At Work  
Regulations 2005*

One manufacturer was fined £16,000 and ordered to pay £11,000 towards the cost of the prosecution for breaching this Act.



# How To Fix It

## Start A Noise Risk Assessment

**Identify where there may be a risk from noise and those likely to be affected**

**TIP:** Most common risks include machinery, sound systems and high-traffic areas



**Obtain a reliable estimate of your employees' exposures and compare the exposure with the exposure action values and limit values**

**TIP:** You'll need fully compliant noise measurement equipment to complete this task



**Work out what you need to do to comply with the Regulations. Are there noise-control measures you can introduce or is hearing protection required?**

**TIP:** Invest in the right level of hearing protection rather than choosing the cheapest option



**Regularly assess noise risks to ensure optimum protection**

**TIP:** If you've changed a process or introduced new equipment, it's time to do another survey

**Learn how our  
noise measurement  
equipment can help  
you**

Mistake 2

**Not Using  
The Right  
Instruments**

# 3 Reasons Why This Is A Mistake

**1**

Your readings might not be accurate or provide enough data for your risk assessment

While cheaper instruments might sound attractive, their accuracy and level of detail can be called into question.

**2**

If you're using an instrument that doesn't meet the Standard, your readings could be invalid

The Control of Noise at Work Regulations 2005 are clear about what you need to use to comply. Are you?

**3**

You could be putting yourself at risk taking the measurements

There are different types of noise measurement instruments, handheld and mounted. Are you using the right one?

# How To Fix It

## Top Questions When Choosing The Right Measurement Instruments

### Q: What measurements do you require?

**A:** Don't over complicate matters. Choose an instrument that offers what you need, not everything going. Here's the minimum data you need for compliance, provided by basic sound level meters.

### Do you need more data than this?

- *The equivalent continuous A-weighted sound pressure level (LAeq)*
- *The maximum C-weighted peak sound pressure level (LCPeak)*

### Q: Is it practical to use a handheld meter?

**A:** Is access an issue? Is it unsafe? You need a noise dosimeter. This unobtrusive device is worn by your employee and captures all the noise data you need.



### Meet the doseBadge noise dosimeter

### Q: Does it meet the required Standards?

**A:** It's all about the Regulations. If it doesn't meet the Standard, your measurements could be called into question further down the line.

*"Your sound level meter should meet at least Class 2 of BS EN 61672-1:2003 (the current Standard), or at least Type 2 of BS EN 60804:2001 (the former Standard)"*

### Q: Can you calibrate the instruments?

**A:** If the answer is no, how can you ensure the instruments are still working and measuring accurately? It's also against the Regulations.



**Our Optimus+ Sound Level Meter fits the Standard & is simple to use. Discover what it can do for you >>>**

Mistake 3

**Not  
Measuring  
Correctly**

# 3 Reasons Why This Is A Mistake

**1**

You are not getting an accurate representation of the noise levels

Just because you have measured the noise in a certain area doesn't mean it represents the noise exposure. Are you doing it right?

**2**

You are breaching the best practice guidelines

If you don't follow the best practice guidelines, your assessments could be invalid during potential disputes.

**3**

You could end up under- or over-protecting employees against excessive noise

If your readings are not an accurate representation of the noise level, how can you provide proper hearing protection?

# How To Fix It

## Follow Best Practice Techniques From The Guidelines

The Regulations say that the noise should be measured at the position of the operator's head, preferably without the operator being present. If they do need to be present then the measurement should be made at least 15cm away but near enough to be representative.



**Done Correctly with an Optimus+ and doseBadge**

### Why Should I Do This?

- You are now capturing accurate data on the risks facing your employees
- You can assess and analyse noise risks based on these measurements
- You will be able to choose appropriate hearing protection and noise control measures to protect your workforce, as well as your business

### Top Tip from our Noise Experts

Have you checked if your employee is right or left-handed? This can make a difference to your readings. Make sure you're measuring from the side of the body that faces the most exposure.

Mistake 4

# Not Calibrating Your Meter



# 3 Reasons Why This Is A Mistake

**1**

You don't know if your instrument has been damaged or malfunctioned before use

Are you responsible for your equipment 100% of time? Even if you are, how do you know it has not developed a fault?

The microphones of the instruments are very sensitive (for obvious reasons) so you want to make sure it's measuring accurately.

**2**

Not calibrating your meter regularly means your readings could be inaccurate

**3**

You are not complying with the Regulations on calibration

Using a meter that hasn't been calibrated for a long time? Your readings might be invalid. Calibrate!

# How To Fix It

## Calibrate! Calibrate! Calibrate!

### What the Regulations Say:

A sound calibrator should be used to check the meter each day before and after making measurements.

*"Your calibrator should meet at least Class 2 of BS EN 60942:2003."*

### How Do I Calibrate My Equipment?

The easiest way is to choose a manufacturer that supplies a calibrator with their instrumentation. The calibrator fits on top of the microphone.

### There's Also Recalibration

You must send your instruments to be recalibrated at least every two years to comply with the Regulations. This will ensure that both your instruments and the calibrator are working correctly.

**If you choose Cirrus Research, we recommend sending your instruments for recalibration every year. Why? This extends your warranty to 15 years and covers against accidental damage.**



We supply complete kits, including your instruments, accessories and an industry-approved calibrator.

Mistake 5

**Not Trying  
To Control  
Noise Risks  
First**

# 3 Reasons Why This Is A Mistake

**1**

There is still a risk from excessive noise levels in your workplace

You've identified a noise hazard and given all your workforce hearing protection but there's still a risk. Can you reduce the risk?

**2**

You could be over-protecting your staff from excessive noise

You've not reduced the noise risk but given hearing protection that cuts noise levels below 70 dB. Can your workforce still hear other warning sounds? Probably not.

**3**

You're still open to action from the Health & Safety Executive

Hearing protection is always the last resort. You should be trying to reduce the noise risks first. Businesses that don't do this can be fined by the Regulator.

# How To Fix It

## Protect Your Employees By Eliminating The Risks

### What Are We Aiming For?

To make sure the legal limits for noise exposure are not exceeded.

### Why?

If you don't attempt to reduce noise, you're still open to action from HSE.

### How? Here's Some Tips From Our Noise Experts

Invest in quieter machinery or adjust working patterns to reduce exposure times. There are also plenty of noise reduction measures you can introduce, such as sound barriers, walls and enclosures.

## Can't Reduce Noise? Here's The Last Resort Option

**You've attempted to control noise risks in your business but they're still above the legal limit, what do you do?**

You can now issue hearing protection. Once taken into account, noise exposure should be between 70 dB and 80 dB.

**TIP:** Select protectors that are suitable for the working environment. Consider how comfortable and hygienic they are.

Finding the right protection can be difficult but there is **an easier way**.

Our **NoiseTools Software** can automatically recommend a range of hearing protection from your noise measurements.

**Even better, it's FREE with our Noise At Work Measurement Products.**

# Measure Your Success

## Now It's Over To You

We've given you some guidance on implementing an accurate process for measuring Noise At Work. Now it's time to review your risk assessments and ensure you are adhering to these best practices.

Remember, it's not just about **protecting your employees**, it's also about **protecting your business** against potential injury claims and fines for breaching these important Regulations.

## Further Reading

Want to know more about measuring Noise At Work? Our Noise Experts have written a series of highly-popular blog posts, based on their years of experience. Check them out for yourself:

[The Risks of Noise-Induced Hearing Loss in an Industrial Workplace](#)

[Control of Noise at Work Regulations – What You Need to Measure](#)

[Choosing Noise Measurement Equipment for Noise at Work](#)

[What's the Difference Between a Class 1 and Class 2 Sound Level](#)

[Meter?](#)

[What are A, C & Z Frequency Weightings?](#)

# Extra Support

## We Don't Only Provide Noise Measuring Instruments

### 5 Reasons To Choose Cirrus Research

#### UK Support & Training

Buying noise measurement instruments is one thing, but using them properly is another. Our noise experts provide training courses around the UK. We'll show you how to get the best from your instruments, as well as help you comply with the Regulations.

#### Made In Britain

All Cirrus Research instruments are designed and manufactured in the United Kingdom, so you can have peace of mind in their quality and longevity.

#### 15-Year 'No Quibble' Warranty

With Cirrus Research, your instruments are always covered. This warranty also includes accidental damage if you recalibrate with us annually.

#### Instrument Calibration & Servicing

Keep your instruments performing at their optimum capacity with our calibration and servicing packages, including UKAS-accredited calibration in our specialist laboratory (lab number 10148)\*. We can also calibrate instruments from other manufacturers too!

#### Licence-Free Data Analysis & Reporting Software

What's the point of having all that data if you can't analyse it? With every Optimus+ Sound Level Meter or doseBadge, we'll give you our FREE NoiseTools Software so you can easily analyse your data and choose suitable hearing protection.

\*Our UKAS accreditation is limited to those activities described on our UKAS schedule of accreditation found [here](#).

# 5 Biggest Noise at Work Mistakes...

..and how to fix them.

Want to find the right  
instruments for the job?

Contact our Noise Experts today  
for a FREE Demo and Quotation

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