

Clear your desk of noise problems - for free...

New remote diagnosis allows EHOs and others to "export" your noise problems...

Many noise problems drag on for months - and even years - due to issues with the diagnosis and the imagined potential extent and cost of the mitigation required. These delays come at a high cost to both the EHO and the perpetrator (time, bureaucracy, legal fees etc). They also come at a substantial cost to the complainants who continue to suffer the nuisance...

...where BAT information is made available, most noise problems can be resolved within weeks

In most cases, there are **Best Available Technology** noise control solutions that cost a small fraction of the expected outlay. In cases where **BAT** information is made available, most noise problems can be resolved within weeks to the benefit of all concerned. Our **Remote Control** process provides this information - for free...

One call and one email may be all that is necessary to resolve many long-standing noise problems.

Remote Control is very substantially faster, cheaper and more environmentally friendly as there are fewer (or no) site visits required, cutting the CO₂ travel footprint.

Noise Control - by Remote Control

The Remote Control of Noise process involves the following steps:-

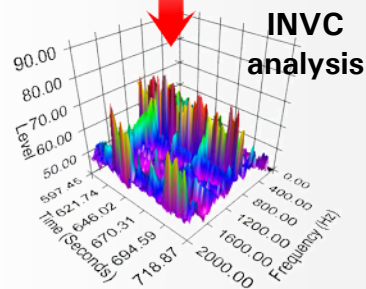
- **Contact Us**
Call to discuss the noise problem and the information we need.
- **Email us the Information**
Email us the information and recordings we need - photographs, noise levels and sound recordings / video sample (if required).
- **Free Analysis and Diagnosis**
*We review the data, strip and analyse the video sound-track and assess the options against our noise control database and past experience. We then provide you with the detailed results and / or an assessment of the noise control options using current **Best Available Technology** with estimates of the costs and potential noise reductions. This can then be used as evidence of what constitutes **best practice** to solve the problem. As the solution is usually so much cheaper, simpler and easier to implement than previously expected (see case studies for examples), it becomes the obvious next step.*
- **Detailed Noise Control Recommendations**
In many simple cases, we can subsequently provide detailed noise control recommendations at low cost based on the information supplied. This includes drawings, material specifications and potential suppliers in sufficient detail for a local contractor to implement the recommendations. In more complex cases, however, a site visit would be required at this stage.



EHO / company

Photos, noise levels, recording or video...

Email



INVC analysis

Free noise analysis, interpretation, solutions database...

BPM / BAT

Case closed...

noise control best practice

Remote Control Case Studies

Commercial Laundry Extract Fan



The noise from this extract fan had been the cause of complaints from nearby residents for some time. The conventional approach would have involved: *noise measurement and analysis site visit; specification of silencers and enclosure; second site visit following installation to assess performance; reporting.* **Remote control:** we provided instructions for recording the fan sound and for acquiring the necessary fan details. We then analysed the recordings and sent detailed drawings for the fan modification. A single site visit was made to check installation and measure the performance - a 20-30dB reduction in tonal content eliminated the problem. The remote control process itself saved c£1k, whilst the source control modification (in place of conventional enclosure / silencer) saved a further £3k (and without the increased running costs). Moreover, the whole process was completed within a few days rather than a few weeks.

Remote Control Case Studies - Continued

Garage Dealership Office Chiller Noise Control

Highly tonal noise from these chillers had been the cause of complaint for some considerable time. The company had already attempted acoustic enclosure with the result that the chillers had over-heated. The EHO sent us sound recordings, photographs and noise levels. Once analysed, we were able to say that the noise problem could be resolved for a few hundred pounds without running the risk of chiller problems. Once this information was passed on to the garage, they contacted us and we supplied them with detailed drawings that they used to get the silencers made locally. Problem solved...



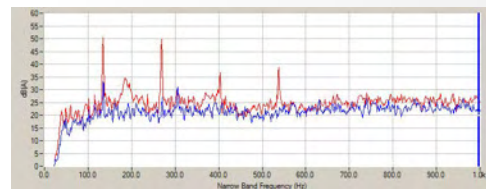
Fans and Vibrating Sieve Diagnosis and Control

Analysis of the video sound-track shot outside the complainant's house and close to potential noise sources on an industrial site allowed us to pin-down the source of the low frequency tone that had been the cause of long term complaints. Based on the mechanical information provided, we proved that the culprit was not the fan previously diagnosed locally, but a vibratory sieve. We then we provided a virtually cost-free modification (mechanical disconnection from the building steelwork) to solve the problem. The whole process cost a few hundred pounds and only took a few days.

Large Industrial Fans

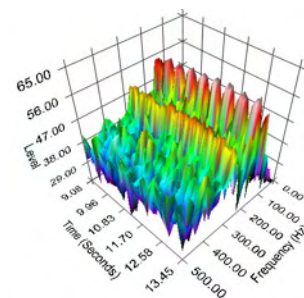


As a result of complaints about noise from 2 large centrifugal fans on a factory roof, the company spent £40k - £50k on acoustic lagging - which had no affect on noise levels. The result was a prolonged wrangle with the authorities - who eventually asked the company to get a 2nd opinion from us.



Tonal noise identification off video

They forwarded a video-clip. Analysis of the sound-track proved that the problem was a pair of tones at the blade-pass frequencies of the fans and 1st harmonics that were interfering and "beating" with each other. We designed the solution (Quiet Fan technology) that eliminated the tones as a feature within a few weeks and at a fraction of the cost of conventional alternatives and with only a single site visit required - the rest of the work was done by email.



LF tonal beating analysis

Pub Chiller

A chiller on the roof of a pub had been the source of a long running noise complaint problem. The saga included past enclosure of the unit which had promptly burnt-out. The replacement chiller was still a noise problem. Analysis of a video and photographs provided by the local EHO allowed us to provide a detailed solution (> 20dB(A) attenuation) that was built using materials from the local DIY store. The total cost of the process to the company was less than £700 (less than the cost of a site visit).

Wind Turbines and other "Difficult" or Low Frequency Noise Sources

We have sophisticated analysis capabilities that allow us to extract and interpret noise features from recordings. This is particularly useful for low frequency complex noise sources or where there are hums that not everyone can hear...

Taking Advantage of Remote Noise Analysis

In addition to noise control, we can also provide you with detailed frequency analyses from recordings. We can process and analyse most forms of sound recording and video sound-tracks using our own bespoke software. However, we prefer digital recordings (wav, mp3, mpg, avi, mov etc) rather than tape. If you do not have access to a suitable recorder/video camera (even a digital camera with sound may be suitable), then we can usually provide you with a simple camcorder by post. Alternatively, contact us for a list of suitable recorder/camcorders that can be bought off the web for as little as £150. There may be a nominal charge for the initial analysis and diagnosis. Calibrated recordings can also be made very easily if you have a sound level meter with an output cable - simply record the calibrator signal followed by the plant noise.

Contact us for technical details and detailed guidance.

INVC on the web - www.invc.co.uk or www.invc.co.uk/services/local-authorities.php

Our web site gives you instant access to the latest developments in occupational and environmental noise, vibration, HAV, case studies (including sound), training, useful links, new products