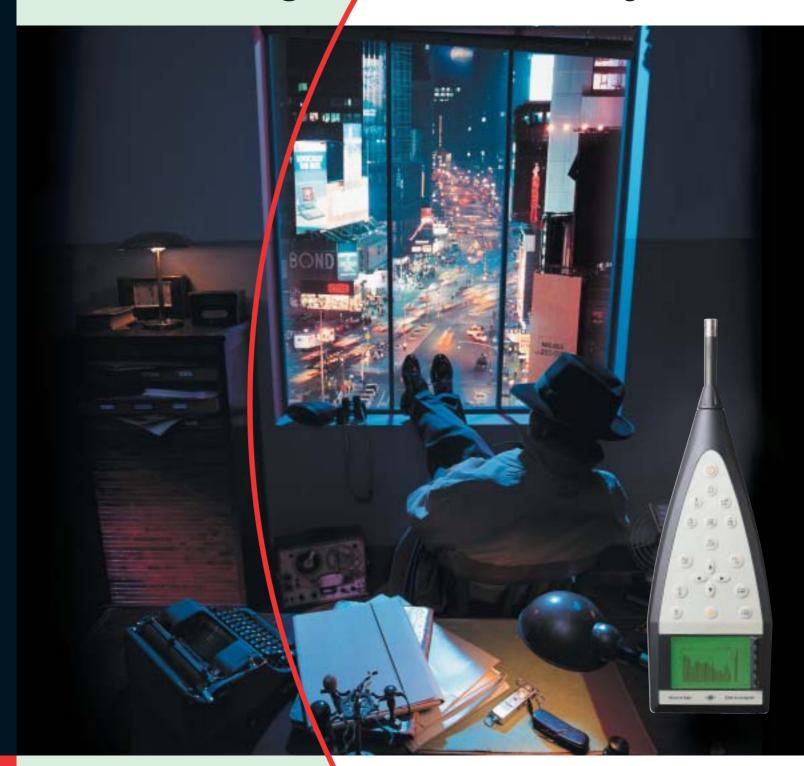
# Ready To Tackle Any Case



With 2260 Investigator

Brüel & Kjær

Wanteda reliable partner

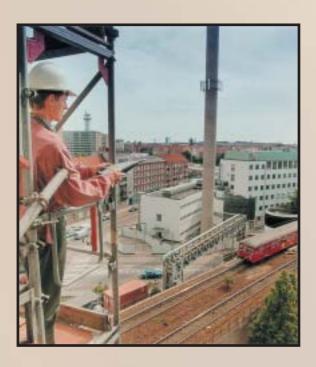
### Where do I begin?

When looking for a sound analyzer, the handheld 2260 Investigator  $^{\text{TM}}$  is your natural starting point.

2260 Investigator is lightweight, fast, precise, gives you analyses on-the-spot and has a host of applications, making it the world's most advanced palmtop sound evaluation system.

2260 Investigator comes directly from Brüel & Kjær's stable of unique know-how and famous product quality. What's more, we offer unprecedented after-sales service and support, including specially designed skills training in the world of sound and vibration measurement.

Fifty years of experience and dedication to superior quality sound and vibration products is Brüel & Kjær's personal guarantee to you. A guarantee for a better quality of life worldwide. Make us your first choice when selecting a reliable partner.





### What's special about 2260 Investigator?

2260 Investigator is programmable. Based on a standard PC architecture and file system, you change 2260 Investigator's current role as easy as swapping from using a wordprocessor to a spreadsheet. One acoustics engineer, equipped with a 2260 Investigator and a full set of application software, can highlight most sound problems and find effective solutions to them. A group of engineers can share one 2260 Investigator, each using their preferred application package as required. 2260 Investigator is cost-effective because you invest in one hardware platform that does it all.

The 2260 Investigator has an uncomplicated user interface with menu-driven software available in several languages. This makes using the 2260 Investigator very easy, saving a lot of time when learning to use it and when setting it up from job to job, thus eliminating wrong measurement setups.

2260 Investigator is all you need to unravel your sound problems.



### Charlie's headache

Nothing was happening. It was quiet in the office.

Too quiet.

I didn't like it.

My advertisement didn't seem to be catching anybody's attention.

Why didn't people need a reliable, experienced and dedicated private-eye, willing to travel the world?

Suddenly the phone rang.

It was Charlie Blue, my sometime assistant. I could hardly hear him, partly because I was only half-awake, and partly because I was holding the receiver upside down.

"Come quickly," he said, shouting against the cacophony coming down the line, "the law is being broken, and so is my head." There was no time to waste. Choosing only to take my 2260, I got out fast.



# **Everything for an easy life**

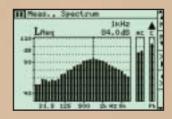
### Why shouldn't life be easy?

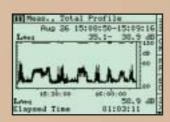
Gone are the days of lugging cumbersome, heavy equipment to make real-time, on-site sound analyses. With the battery-operated, hand-held 2260 Investigator, you make on-the-spot evaluations of the sound in question. Let 2260 Investigator quickly and accurately discover the essence of your sound problem while still on-site. Once back in the office, review and document the results at your leisure by connecting the analyzer to your own PC via an RS-232 link, or give the results to a colleague using a PC-card.

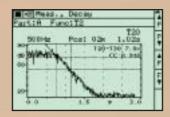
### Chameleon qualities

There's more to 2260 Investigator than meets the eye. Armed with a single 2260 Investigator you can make real-time 1/3-octave spectral analyses, see reverberation-time graphs or do sound power measurements, depending on the current application. The range of application software is supplied on CD-ROM making it easy to load one or more applications into the instrument, and new applications are constantly being developed in close cooperation with our customers.



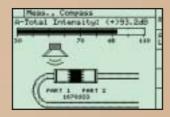


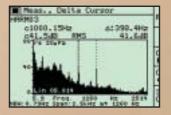














Preamplifiers for microphones or accelerometers

Charge Injection Calibration (CIC) facilities

2-channel input stage

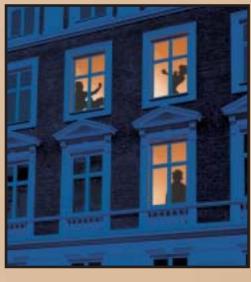
Large dynamic range

Digital Signal Processor (DSP)

Standard PC architecture and file system

Large non-volatile memory

PC-card technology



### Mercury and lead

I stepped out of the office building into a puddle. It was raining. The Chrysler had a flat. I took the uptown bus. Lucky that my 2260 slips comfortably into a trenchcoat pocket.

Climbing the back stairs at Charlie's place I at once felt the problem.

Heavy metal.

But how much?

This would be an interesting case.

Punch, punch. The 2260 was programmed. "What kinda' star-wars piece is that you're

packing, buddy?" asked a guy who had sidled up.

I glared at him, then I ignored him. He scurried away. I took a sample.

Only 80 dBA. I was disappointed.

No more bels than Big Ben, but there was something fishy going down.

I needed time and peace to think.
I left.



## **Deep** undercover

#### **Buried treasure**

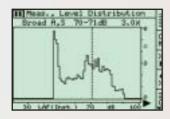
Every 2260 Investigator is supplied with Basic Sound Analysis Software. With this software, 2260 Investigator becomes a Type 1 sound level meter with real-time displays of frequency analysis, 1/3-octave spectra and statistical distributions.



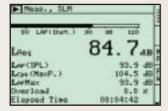
To extend the capabilities of 2260 Investigator, load a new application from the range supplied on a CD-Rom, for example community noise, building acoustics, pure tone detection or sound power/intensity.

2260 Investigator has the CIC (Charge Injection Calibration) facility that enables you to regularly monitor the microphone capsule's condition, and hence confirm the calibration reliability.

The unique Multi-D™ analysis technique used by 2260 Investigator saves time and improves data consistency by concurrently measuring broadband, spectral and statistical parameters.



And for those jobs that require long sampling periods in outlying places, use the modem dial-up facility to remotely interrogate 2260 Investigator, thus saving a site visit.

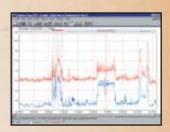


### Beneath the surface

Once you've completed your measurement, the data is safely stored on 2260 Investigator's internal disk or external PC-cards. Transfer your data via the RS-232 serial interface or move the PC-card to your office computer.

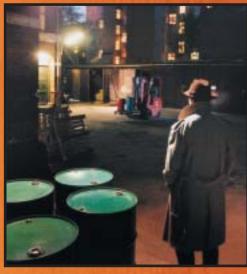


Depending on your application, use Evaluator™, Qualifier™ or Noise Explorer™ software to view and manage your measurements. The data is displayed graphically or as tables, and the powerful editing facilities allow removal of unwanted data and combining several samples into one – for example when producing an overall Rating Level ready for comparison with local limits.



When satisfied with the results, print them out, or export the data to other Windows® applications to create an impressive document of your work.





### Legwork

It had stopped raining.

I decided on the park, wandering aimlessly, though I knew where I would end. I emerged from the shadow of Mayor Price's statue to see my rival Frankie Muldoon emerging from the shadow of the boathouse.

I darted behind Mayor Price to observe. Poor Muldoon, still living in the dark ages. How can he possibly be covert, carrying around all that equipment? Now I understood why he had earned the nickname "Quasimodo".

Muldoon limped by me, oblivious of my presence.

I left the shadows and walked towards the funfair, lured by the garish lights. But tonight, this was not for me. The pipe-organs, the stallholders, the duckshoot and the roller-coaster were all too much.

I needed peace. I had to get home.



# You cannot exclude noise by soundproofing your mind

### Community noise

Does the noise from a neighbouring factory give your clients a headache? Or the constant noise from the nearby motorway drive them insane? 2260 Investigator and its Noise Profile software is here to help them.



Take your noise samples on-the-spot, or alternatively log samples for up to a month by leaving the analyzer unattended, safe and dry in its robust outdoor protection gear. With the Noise Profile software, the analyzer has a 110 dB dynamic range, ensuring measurement results cause no overloads. This reduces the risk of having to repeat lengthy measurements.



Back in your office, use a PC to drag-and-drop the logged results into our Evaluator software and instantly begin to produce rating level figures.

### Sound power/intensity

Traditionally, sound-power systems have been reserved for the laboratory. When on-site measurements were required, cumbersome and weighty equipment connected with a welter of cables were the order of the day. All this fades into the past with 2260 Investigator.

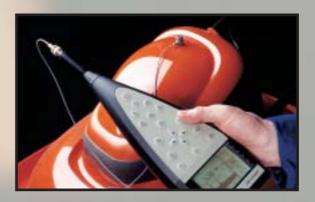
For sound-power measurements in difficult conditions, swap 2260 Investigator's microphone for an intensity probe. Prompted by the software, make, for example, a grid-based scan of the sound field under inspection. 2260 Investigator logs and pools the results, ready to produce an analysis of the sound power and intensity on-the-spot.

Treat yourself. Travel light with our portable, hand-held, battery-operated sound-power measurement system.



### Vibration or pure tone investigation

Use FFT software in your 2260 Investigator for sound or vibration FFT analysis when investigating machinery, troubleshooting, investigating pure tones, developing products, controlling quality, and analysing building vibration. This hand-held FFT analysis system gives you single-channel, real-time operation with internal and external triggers. You can see FFT autospectra Lin or A-weighted, and compare a measured spectrum to stored reference spectra.



### **Building acoustics**

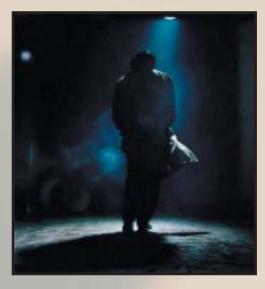
Ever wondered whether you're living beneath a herd of charging elephants? Tired of being forced to listen to partying neighbours? 2260 Investigator is part of a complete package for solving difficult building-acoustic measurement problems. The portable, compact and lightweight equipment means that you reach the site effortlessly and quickly.

The easy-to-set-up system gets the sound measuring done in no time, particularly since a wireless connection between 2260 Investigator's built-in generator and the sound source is available. And what's more, you can view your insulation and reverberation time results as they come in and reach the crucial verdict on-the-spot.



Brüel & Kjær's 2260 Investigator can help solve your noise problem and put a smile back on your face.





### No red herring

My head was pounding from the sounds of the funfair and Charlie's place.

Thank goodness for the stillness of my office. I fired up my 2260 again.

It didn't take long to find Charlie's culprit. There, on the spectrum graph. The deep bass. That was the something fishy causing Charlie's headache.

There were several solutions, but only one was not antisocial.

I dialled Charlie. He didn't need to say anything. I could hear it was his pad I had rung to. "Charlie, you could tell them to cut it out, or you could tell the electricity company to cut it off. My advice is, move out."

## **Choosing tools**

2260 SOFTWARE Tool	Basic Sound Analysis BZ 7210*	Enhanced Sound Analysis BZ 7206	Noise Profile BZ 7203	Sound Intensity BZ 7205	Building Acoustics BZ 7204	Room Acoustics BZ 7207	FFT Analysis BZ 7208
Type 1 SLM (All relevant parameters)	Х	Х	Х		X**	X**	
Real-time 1/1-octave Analysis	8 Hz-16 kHz	8 Hz-16 kHz		31.5 Hz-8 kHz	63 Hz-8 kHz	63 Hz-8 kHz	
Real-time 1/3-octave Analysis	6.3 Hz-20 kHz	6.3 Hz-20 kHz		25 Hz-10 kHz	50 Hz-10 kHz	50 Hz-10 kHz	
Real-time FFT Analysis							Х
Manual Charge Injection Calibration	Х	Х	Х		Х	Х	Х
Automatic Charge Injection Calibration	Х	Х					
Broadband Statistics	Х	Х	Х				
1/1- or 1/3 - octave Statistics		Х					
Back-erase	Х	Х					
Data Logging	Х	Х	X				
Profile with Periodic Reports			Х				
Markers in Profile	Х	Х	Х				
Event Recording		Х					
DAT Recorder Control	Х	Х					
PC Sound Recorder Control	Х	Х					
Dynamic / Linearity Range	80 dB	80 dB	110 dB	***	90 dB	90 dB	***
Measurement Time Resolution		100 ms	10 ms		8 ms	8 ms	21.33 ms
Reverberation Time					Х	Х	
Sound Insulation Calculation				Х	Х		
2-channel Measurement				Х	Х		
Sound Intensity Measurement				Х			
Sound Power Calculation				Х			
Trigger		Х					Х
Autospectrum							Х
Tonal Audibility Calculation							Х
Timer Control	Х	Х	Х				

2260 SOFTWARE	BZ 7210*	BZ 7206	BZ 7203	BZ 7205	BZ 7204	BZ 7207	BZ 7208
PC PROGRAM							
Predictor 7810 Prediction and Management Software	Х	Х		Х			
ENPro 7811 Environmental Noise Prediction and Design Software	Х	Х		Х			
LIMA 7812 Environmental Noise Calculation and Mapping Software	Х	Х		Х			
Noise Explorer 7815 Data Viewing Management and Archiving Software	Х	Х	Х	Х			Х
Evaluator 7820 Environmental Noise Evaluation Software	Х	Х	Х				Х
Protector 7825 Personal Noise Exposure Software	Х	Х	Х				
Qualifier 7830 Building Acoustics Software					Х	Х	
Qualifier Light 7831 Room Acoustics Software						Х	
DIRAC 7841 Room Acoustic Measurement Software	Х	Х	Х	Х	Х	Х	Х

<sup>\*</sup> Included with 2260

<sup>\*\*</sup> Not all Parameters

<sup>\*\*\*</sup> For Dynamic Range, see Product Data Sheet



To ensure that you receive the full benefit of our equipment, Brüel & Kjær offers worldwide service and support including accredited calibration, on-site traceable calibration, installation, software maintenance and upgrade contracts, product training, and application courses.

### Literature

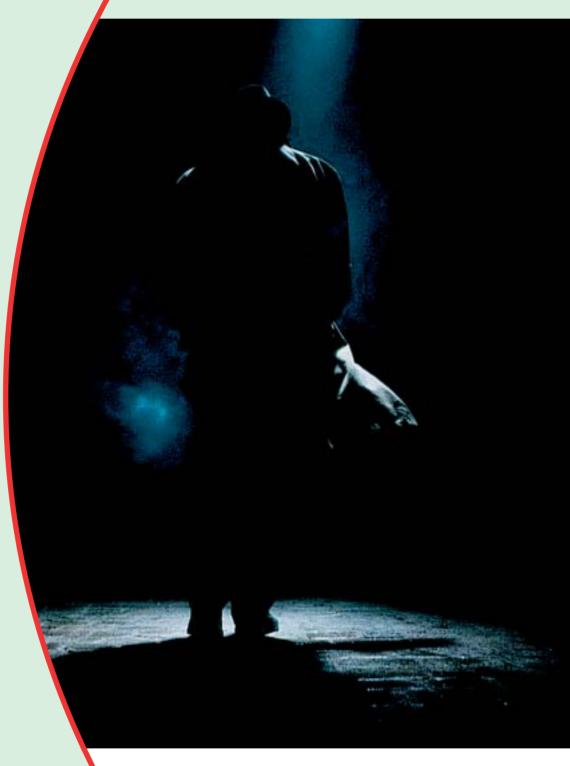
We offer a comprehensive range of high quality literature that includes User Manuals, Product Data Sheets, Brochures, Application Notes, Bulletins and Brüel & Kjær Magazine.

### **Contact Us**

If you have any queries, please contact your local Brüel & Kjær sales representative.

#### Internet

We're never further away than www.bksv.com



HEADQUARTERS: DK-2850 NÆRUM · DENMARK · TELEPHONE: +45 45 80 05 00 FAX: +45 45 80 14 05 HTTP://WWW.BKSV.COM · E-MAIL: INFO@BKSV.COM

Australia (0061) 2 9450-2066 · Austria (0043) 1 865 74 00
Brazil (0055) 11 5182-8166 · Canada (001) 514 695-8225
China (0086) 10 680 29906 · Czech Republic (00420) 2 6702 1100
Finland (00358) 9-755 950 · France (0033) 1 69 90 71 00
Germany (0049) 6103 73350 · Hong Kong (00852) 2548 7486
Hungary (0036) 1 215 83 05 · Ireland (00353) 1 803 7600
Italy (0039) 0257 68061 · Japan (0081) 3 3779 8671
Republic of Korea (0082) 2 3473 0605 · Netherlands (0031) 318 55 9290
Norway (0047) 66 771155 · Poland (0048) 22 858 93 92
Portugal (00351) 21 4711 4 53 · Singapore (0065) 377 4512
Slovak Republic (00421) 25 443 0701 · Spain (0034) 91 659 0820
Sweden (0046) 8 449 8600 · Switzerland (0041) 1 880 7035
Taiwan (00886) 22 713 9303 · United Kingdom (0044) 14 38 739 000
USA (001) 800 332 2040
Local representatives and service organisations worldwide

