

# HISTORY AND REBIRTH OF A WELL-KNOWN INDUSTRY TOOL – THE ENTERTAINMENT INDUSTRY SOUND MONITOR

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In about 1977 the acoustic industry recognised the need for an electronic device to control the levels of sound in entertainment venues. The late Alan Elson had a company in Sailors Bay Rd, Northbridge in Sydney called Audio Developments Pty. Ltd. and in conjunction with and the inspiration of Peter Knowland and Richard Heggie, he designed and manufactured the original ADN-1 Noise Monitor.



Figure 1 The original ADN-1 Noise Monitor

The original innovative design concept was simply to keep track and automatically restrict noise levels in venues. The electronics were housed in a cream electrical type enclosure. The visual display unit was a wall mounted wooden box with three partitions, which housed three 60 watt 240 volt globes behind separate RED and BLUE and GREEN Perspex lenses that indicated the SET threshold, -6 and -12 DB. This was installed so the musicians could observe the sound level they were generating and if they did not heed having reached the required SET level they were warned that their power would be cut off after a set number of seconds.

The device certainly did its job and overcame lots of noise exceedence problems much to the delight of venue owners, but understandably generated a culture against it from musicians and their “roadies” who thrived on ways of “Beating it” – one popular one was putting chewing gum over the microphone, needles through the diaphragm, or unplugging it. To overcome this, several sensing microphones were installed in very

inaccessible locations so no one was sure which microphone was live. One memorable public reaction to the Noise Monitor turning off the power to the band, was at the Long Jetty Hotel in 1979 when an up and coming young band called “AC-DC” caused an audience riot and subsequently caused \$30K damage.

Venue managements eventually realised there was a need for proper sound control rather than the Noise Monitor’s “absolute control” and they should seek advice to make venues compliant with noise ordinances. Several Acoustic firms established specialty consultancy for venue owners to address the real problem of sound proofing and poor noise containment.

The production and distribution of the Noise Monitor in the early 80’s moved to Sound Affair Pty. Ltd in Chatswood who became Sontec (NSW) Pty Ltd. They redesigned the Noise Monitor circuitry using updated components but with same original performance criteria and housed in a legendary “blue box” seen in many venues. Some consultants knew the rebadged monitor as a “Sontec Model PNM 1” (Programmable Noise Monitor) and enjoyed national distribution through the National Sontec network. Production ceased when Chubb acquired the Sontec Companies and stopped producing the Sound Monitor in 1999.



Figure 2 The current CSM-2 Sound Monitor

In 2000 the national Tecsound group of companies had the Noise Monitor redesigned using current technology and

refinements to avoid an Intellectual property conflict with the new owners of Sontec and changed its description to “Sound Monitor.” The refined SOUND MONITOR included a Low pass filter, an automatic cut off if the sensing microphone was removed or its cable damaged, and a clock accessory that automatically changes the setting of the activation threshold by 3dB after midnight. Tecsound was purchased by a public company in 2005 and subsequently ceased trading and the Sound Monitor became unavailable in 2012. Technology Sound and Vision (being the original Sound Affair Pty Ltd) bought the Intellectual Property Rights of the Tecsound CSM-1 (Calibrated Sound Monitor) and incorporated additional modifications requested by acoustical engineers and it is now known as the Technology Sound and Vision CSM-2.

The evolution of the device has always been by consultation with the Industry to provide a real world solution. The device is now available with a “SOFT BOX” option which selectively attenuates the signal to the Power Amplifiers rather than simply and abruptly turning off the power. New applications include monitoring sound levels in outdoor areas – beer gardens, restaurants and smoking areas. These applications utilise the device’s existing “SOUND EXCEEDANCE” relay to activate an external remote device (e.g. light or pager) to alert Security or the Duty Manager of a potential sound problem. Proudly the original Iconic Noise Monitor, today known as a Sound Monitor, has returned to production and is available again housed in a cream coloured box with a modern LED remote visual display unit.

# Inter-Noise 2014

MELBOURNE AUSTRALIA 16-19 NOVEMBER 2014



The Australian Acoustical Society will be hosting Inter-Noise 2014 in Melbourne, from 16-19 November 2014. The congress venue is the Melbourne Convention and Exhibition Centre which is superbly located on the banks of the Yarra River, just a short stroll from the central business district. Papers will cover all aspects of noise control, with additional workshops and an extensive equipment exhibition to support the technical program. The congress theme is *Improving the world through noise control*.

## Key Dates

The dates for Inter-Noise 2014 are:  
 Abstract submission deadline: 10 May 2014  
 Paper submission deadline: 25 July 2014  
 Early Bird Registration by: 25 July 2014

## Registration Fees

The registration fees have been set as:

Delegate	\$840	\$720 (early bird)
Student	\$320	\$255 (early bird)
Accompanying person	\$140	
Congress Banquet	\$130pp	

The registration fee will cover entrance to the opening and closing ceremonies, distinguished lectures, all technical sessions and the exhibition, a USB containing the full papers and light lunch plus morning and afternoon teas. The Congress Banquet will have a strong Australian theme and feature the opportunity for delegates to take photographs of themselves with native Australian animals, so should prove to be a major attraction.

The social program commences with the welcome reception on the Sunday evening after the opening and first plenary lecture. On each of the following days, the morning and afternoon refreshments and light lunch (all included in the registration fee) will be provided in the exhibition area. The optional banquet (additional charge applies) will be held at the venue and provide, along with great food and wine, an Australiana theme. After the final sessions the closing reception will bring the congress to an end. Additional features are included in the program for accompanying persons.

An exhibition of the latest developments in equipment and acoustic related materials will take place in the foyer of the Conference centre

from Monday morning until Wednesday lunch-time. Over 50 out of 60 booths are already booked by international and Australian companies. More details on booking space in the exposition available from [www.internoise2014.org](http://www.internoise2014.org).

## Technical Program

The opening plenary lecture will be: “Sound Sketch: its Theory and Application using Loudspeaker Arrays” by Prof. Jung-Woo Choi of South Korea.

The closing plenary lecture will be: “Soundscape Planning as a Complement to Environmental Noise Management” by Prof. Lex Brown of Australia.

The four keynote topics, by world authorities on their subject, will complement major areas within the Congress. They cover Aircraft Noise, Active Noise Control, Wind Turbine and LFN as well as the Impact of Building Acoustics on Speech Comprehension and Student Achievement.

ABSTRACT SUBMISSION IS NOW OPEN and submissions are sought in relation to the broad theme of the Congress - “Improving the World through Noise Control” . The online abstract submission allows you to select the most appropriate session from the list of over 100 sessions. The Congress will feature 12 parallel sessions as well as an area for poster presentation.

**Abstract deadline is 10 May 2014 and this date is firm and will NOT BE EXTENDED**

During the year the details of technical study group meetings plus workshops and courses will be provided on the website.

**More details on all aspects of the conference at [www.internoise2014.org](http://www.internoise2014.org)**