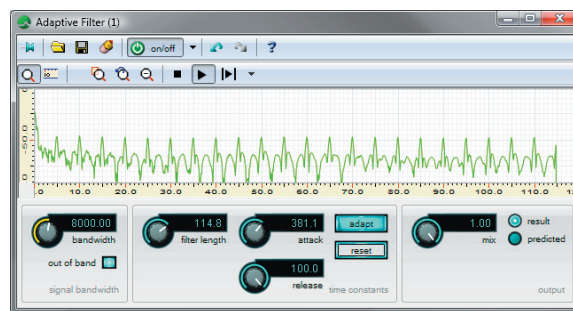




## Tools for forensic audio...

# CAM10: Adaptive filter pack - v2

CEDAR Cambridge Forensic Systems have been developed specifically for agencies and forces engaged in audio surveillance, transcription, and terrorism countermeasures. The Adaptive Filter pack incorporates four different types of adaptive filter, with Time Align software to maximise the benefits of the multi-channel filters.



The **Single Channel Adaptive Filter** removes many forms of interference and background noise, making speech signals more listenable and more intelligible, aiding transcription and making recordings more presentable for the courtroom and juries. Alongside this, the **Single Channel Lattice Filter** digs deeper into a noisy recording and is capable of extracting more fricative sounds and consonants that would otherwise be buried in noise.

The **Cross Channel Adaptive Filter** eliminates the masking effects of televisions, radio broadcasts and other measures used to obscure conversations, while the **Cross Channel Lattice Filter**, the most powerful of these filters, can make voices clearly audible and intelligible even when they are barely apparent in the original audio. To maximise the efficacy of the cross channel filters, the **Time Align Module** provides precise visual feedback about the relationship between (up to) eight reference and surveillance signals, allowing you to align them to an accuracy of 1ms.

### CEDAR's unique 2-band filter architecture

Each of these filters includes CEDAR's novel bandwidth and proprietary 'out of band' capabilities that allow you to add back much of the energy in sibilants and fricatives to maximise the intelligibility of the speech. This makes CEDAR's adaptive filters far more effective than products that analyse and filter the whole signal in a single frequency band.

### Precision tools for the most testing audio forensic applications