**Sonnox**

# Fraunhofer Pro-Codec

For PC & Mac

Does this new plug-in really take the hit-and-miss out of audio compression? **Hollin Jones** introduces the Fraunhofer Pro-Codec.

## Fraunhofer Pro-Codec

Manufacturer **Sonnox**

Price **£295**

Contact **sales@sonnoxplugins.com**

Web **www.sonnoxplugins.com**

Minimum system requirements

**PC Windows XP, iLok**

**Mac Intel processor, Mac OSX 10.4, iLok**

*VST/AU/RTAS host*

### Key Features
- **Audition/encode multiple codecs in real time**
- **Advanced visual feedback**
- **A/B mode**
- **Offline encoding and decoding**
- **HD/lossless codecs supported**

A great deal of digital audio is now consumed in a compressed format of some description. iTunes, Amazon, web radio and online audio and video streaming services all supply audio in a format that utilises file sizes and data rates which are much smaller than AIF or WAV – and it's all achieved through compression. We are all fairly used to this practice, but it can pose a problem for those working in audio production, particularly at the more commercial end. Compressing audio means that you risk losing audio quality and fidelity – and worse, introducing the kinds of tinny phasing effects at the top end of the frequency spectrum (this was a feature of early, low-bitrate mp3s).

The problem is that encoding audio is a process that you have to carry out, appraise the results, then decide whether you're compressing too hard or not enough. The trade-off between audio fidelity and file size is tricky to get right and it can be time-consuming, especially if you're having to encode a file five or six times before you get the

### Measuring Up

The Pro-Codec has no equivalent at the moment in the sense of being able to preview and tweak compression codecs in real time. Some wave editors are very capable of batch-processing audio files (WaveLab, Waveburner, etc) but not multiple streams and not with auditioning. Adobe's Media Encoder and Apple's Compressor can batch-process audio to different formats, but they lack the immediacy and detailed visual feedback of Sonnox's offering.



compression level right. But now, Sonnox has come up with the Fraunhofer Pro-Codec, which seeks to address these problems. Coming in all major plug-in formats for Mac and PC, it can be applied across the master outs from a DAW (or in a wave editor for that matter) and is able to take an audio stream and apply up to five different codecs and compression rates in real time. You can tweak and tune these, view all kinds of visual feedback about possible distortion and output up to five files with a single click.

### Real-time compression

Click on the codec list and you can choose between mp3, mp3 Surround, AAC-LC, HE-AAC and HE-AAC v2 formats as well as mp3-HD and HD-AAC, which are lossless codecs. Click on each one and you can change its settings, including bitrate, mode and quality. By clicking the Audition button next to any codec you switch playback to that slot and thus hear your track played back through it.

This is a huge time-saver if you need to output a range of different-quality audio streams while retaining control over each one. You don't have to process a track and wait to hear the results, it happens in real time. It's especially good if you work with long audio files (movie scores, audio books, lectures, etc) which take longer to process than music tracks. Switching between codecs doesn't glitch, although there is a slight pause in the audio. Very low buffer settings didn't work so well, but on a

MacBook Pro i7 with Cubase 6 running at 256 samples we loaded five codecs and flipped between them seamlessly (there's really no reason to run at 128 samples for encoding – bounce down/ freeze CPU-intensive tracks or bounce a stereo mix and load it into a fresh project before applying the plug-in).

You can audition the difference between input and output signals, plus there's an interesting 'blind testing' mode whereby you use your ears to determine the codec in use. There's also extensive graphical feedback and you can see and audition the audio that is being removed by the encoding process. A 'diff' signal shows the audio that is masked by other parts of the sound and therefore won't need to be encoded.

If you use lossless codecs you won't see a diff signal, but there is advanced bitstream monitoring and a phase display to monitor differences between the input and encoded audio. Offline encoding/decoding is supported too.

### Codecs to go

This plug-in is perhaps not for the casual user who is happy with iTunes. But for anyone working commercially it's a huge time-saver and an invaluable tool. When you're mixing or mastering, it will enable you to create specific mixes optimised for specific codecs. Instead of sending a WAV to someone else to compress, you can compensate for compression at the mix or mastering stage, adding more top, boosting the bass or whatever else is required.

Crucially, though, you can do this in real time, outputting up to five files at once targeted at different destinations. Exporting offline, it should be noted, is blindingly quick. Put simply, it's one of those tools that you use and wonder why no one had thought of it before… But now that they have, we reckon it's an essential buy for anyone working with audio for digital distribution. **MTM**

### MTM Verdict

**WHY BUY**
+ **Unique solution**
+ **Easy to use**
+ **CPU-efficient on newer machines**
+ **Excellent visual feedback**

**WALK ON BY**
- **More useful for professionals than less experienced users**

*An elegant solution to an age-old problem and a great time-saver for those distributing digital audio.*

★★★★★★★★★☆