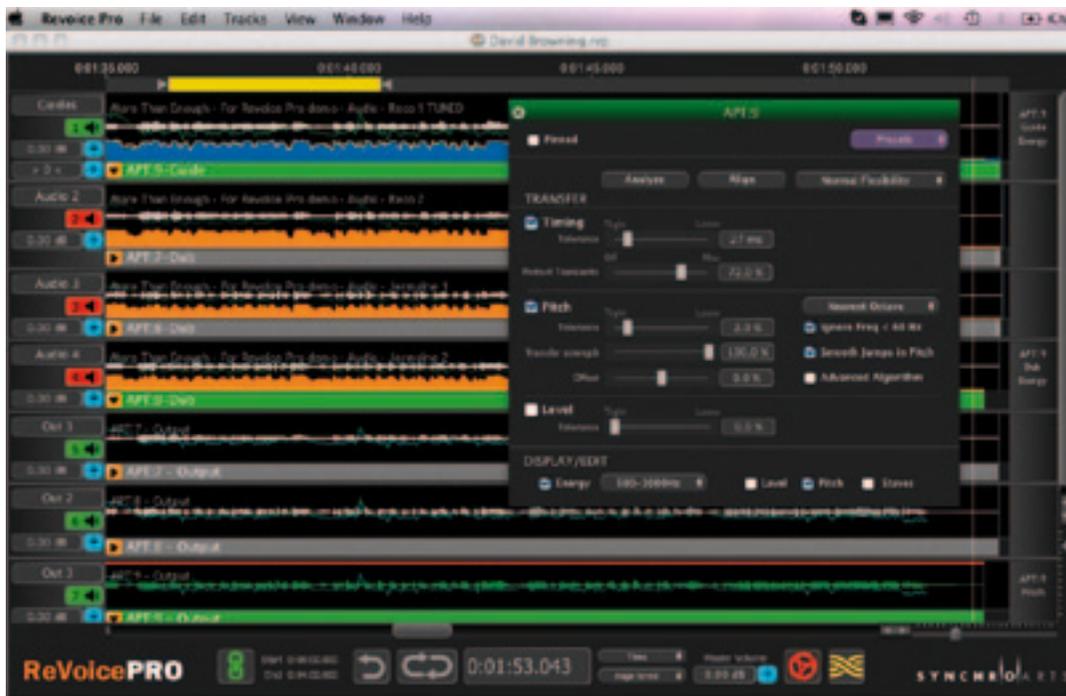# Synchro Arts Revoice Pro

Billed as a revolutionary evolution in ADR software, JIM BETTERIDGE finds he can now match timing and pitch and level.

*R*evoice Pro is something of a step change in voice alignment processing. In essence it is able to measure several parameters of one performance (the guide) and impose those parameters on a second performance (the original). This has applications in music and sound-for-picture postproduction. For example, in Automatic Dialogue Replacement (ADR), let's say an actor's delivery has been marred by extraneous noises on set and she needs to record a clean replacement performance that fits her existing mouth movements. Her new performance may be deemed excellent save for the fact that certain words or syllables are a little longer or shorter than the original, and so don't fit her lip movement on film. A skilled ADR recordist may compare the new waveform with the original and manually stretch/compress words or syllables of the new recording to achieve acceptable lip sync. Alternatively, he may use a plug-in such as Synchro Arts' VocAlign to achieve the same end automatically. Until now this was basically the state of the art.

Revoice Pro is different because it not only attempts to match timing but also adds the option to match pitch and/or level. So perhaps the director is happy with the new delivery but would prefer it to go up a little at the end to denote surprise as the original had done. Not only can you tell Revoice Pro to impose the timing, pitch and level parameters on just that section of the recording but also to what degree. So if you don't want the full blown hysteria of the original you can dial it back to mere excitement. This ability to limit the degree to which the system attempts to match the various parameters can prevent it from attempting practically impossible alignments: if it were to pitch shift the new recording by 70% to try and restore the original sense of shrieking panic it's very likely to sound unacceptably 'processed'. By scaling down the pitch correction (0% to 100%) and setting an error tolerance (i.e. what Revoice Pro leaves alone) you can push it in the right direction while maintaining a natural sound.
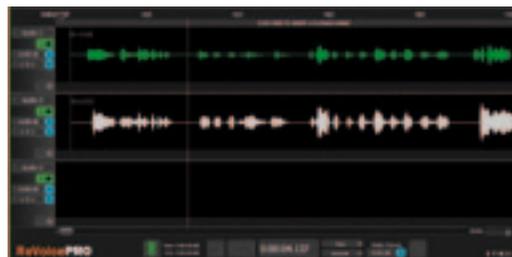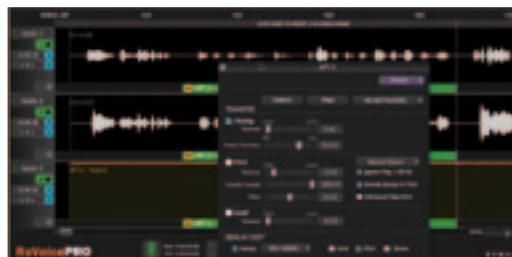
This type of manipulation is also extremely useful when working on television documentaries. Although the voice-over is generally recorded quite late in the sound postproduction process, delayed legal decisions mean that it's not uncommon for the lawyers to insist on eleventh-hour changes to a script long after it's been recorded and the voice artist has left

to go on holiday. So the task becomes to construct a new sentence from scraps gleaned from previous recordings of that actor. If it's a long TV series you may have many other episodes to choose from but even so it's often impossible to find the right words with the right performance to fabricate a new sentence of any complexity that sounds natural.

As a simple example let's say we have the following two recorded lines:
1. Since 2001 very little has changed in that regard.
2. The United States has spent more than $25 billion in creating a modern Afghan army.

And we want to create a third line:
3. The United States has spent more than $25 billion in creating a modern Afghan army since 2001.

The words are all there but the stress and intonation is wrong *(Like so much in life, Jim. Ed)*. In effect, for the new line, you want to remove the full stop after Afghan army and introduce a full stop after 2001. Until now this has been practically impossible. With Revoice Pro the rerecording mixer can simply turn on the talkback mic in the control room, record his own version of the new line with the desired performance and impose its parameters on the actor's original delivery. And it really does work, even if the engineer is male and the actor is female — the changes are all relative.

This ability to make a statement a question, a question a statement, the middle of a sentence the end of a sentence or a calm response sound surprised really is a game changer for programme makers. Applying this to narration is unlikely to upset anyone but, given reasonably low ambient noise levels, it could conceivably be applied to sync sound to adjust performance in a drama or, more contentiously, in a documentary.

Experience will doubtless uncover other applications; it may not be quite right for crowd scenes but if you needed a large crowd to shout something in unison like 'The king is dead, long live the king', it could help turn your handful of actors into a hallfull. Sound designers too are very likely to want to ask what happens if you…

The system has also been well received by music producers and engineers for automatically doubling vocals without too much rigidity, bringing tracked vocals closer to the original and more subtly achieving pitch-correction. It is a good point to mention that it's different from other pitch correction plugs that effectively use a grid of acceptable notes and pull any errant utterance up or down to fit. With Revoice Pro, as long as you can create the correct performance, you can subtly or strongly push your recording in that direction in various ways — including replicating vibrato.

Revoice Pro is currently available only on Mac. The restrictions of the various manufacturers' plug-in implementations have led to Synchro Arts making the processing engine a standalone program and not a plug-in. However, plug-ins that link the DAW to Revoice Pro are being made available, the first being an Audio Suite Link to Pro Tools.

Revoice Pro costs £374 (+ VAT) although there may be some introductory offers available and a possible discount for existing VocAlign owners. ∎

PROS Unprecedented facility to change and match vocal performances including the intonation of a voice over.

CONS No Windows version.

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