iZotope RX 7

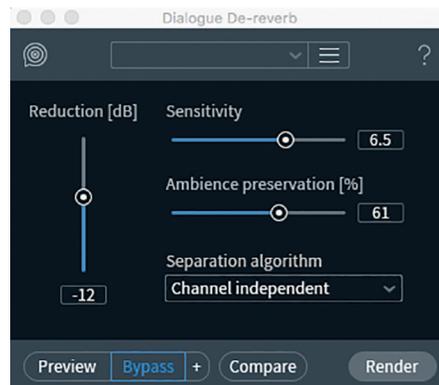## Useful new features — **BILL LACEY** contours his dialogue

RX version 7 is upon us with some exciting new updates. Offered in three packages — Elements, Standard or Advanced — RX 7 brings a mighty plethora of tools to both the music and post audio communities. There's something for everyone, and a few in particular to get excited about.

Dialogue Contour is a fantastic new module that is designed to allow for adjustment to dialogue inflection to modify performances or edits that sound awkward. The ability to adjust the pitch of sections of or entire words goes a long way towards making problem dialogue edits more palatable. The module window displays a spectral display of the selection along with a smaller waveform display above to aid identification. It's easy to add and drag nodes, reset their values to zero or remove them. Sliders allow for smoothing between nodes, scaling applied to formants and a pitch offset that can be applied to the entire selection. Overall, operation was very smooth and I found it easy to at the very least improve upon if not entirely solve most problems I threw at it. Unfortunately there's no way to manipulate rhythmic placement for ADR matching.

Dialogue De-reverb is something else to be excited about. I haven't been too happy in the past with the De-reverb module, especially when applied to dialogue. The new module is custom tailored for dialogue recordings. The simplified interface does away with reverb profiles and instead utilizes a machine learning algorithm to separate dialogue from the reverberant signal. A new Sensitivity control helps the algorithm identify reverberant content. The more significant Ambience Preservation control lets users adjust how much of the background signal to be retained. This allows for much more natural sounding separation, unlike the more gated-sounding results previously experienced. Finally RX has a good-sounding algorithm for dialogue work, and with careful balancing of Sensitivity, Reduction and Ambience Preservation very good results can be obtained.

New processing option: Separation Algorithm

Separation Algorithm is an important new processing option seen in Dialogue De-reverb and Isolate, De-rustle and Music Rebalance. Users may choose between Channel Independent, which applies the algorithm to the input channels independently (the default and most CPU efficient method); Joint Channel, offering higher quality and best for stereo files with similar left/right content; and Advanced Joint Channel, offering the highest quality but at the price of longer preview times and, in the case of Music Rebalancing, interrupted preview (depending on your computer horsepower).

A number of modules in the RX Editor are not capable of high quality real-time preview. The amount of processing power and resulting latency make it necessary to offer a lower quality preview. This somewhat dampens the user experience in some modules, in particular Music Rebalance. The workaround is to use Compare, which renders out a full quality preview. This can be untenable with lengthy selections, so it's best to work with smaller chunks of sound before committing changes to the whole file.

Repair Assistant exists to offer processing chain suggestions for less-experienced users. This is a good thing, as RX is ever more affordable and in use by users who perhaps haven't developed the right sensibility for such tools, which can do more harm than good in the wrong hands. While I welcome this offering, in practice it doesn't always offer the best sounding solutions. Repair Assistant first analyses one of three categories of sounds — dialogue, music or 'other'. It then looks for things like clipping, hiss, hum, clicks, etc. and offers three different suggested module chains. Users can easily audition any of the three, compare to the original, open up the module chain, identify and modify individual parameters, increase or decrease the strength of the entire chain and apply the selected processes. Modules can be individually bypassed, swapped out with an alternate and target a specific frequency range if desired. In practice I found the choices sometimes arbitrary or misguided. To be fair, it's just a potential starting point — machine learning isn't that smart yet. I suspect experienced power users won't have much need for this, but certainly as a learning tool for beginners it has value.

Music Rebalance is perhaps the most idealistic entry in this update. In theory, given the lack of stems for a mix, one can rebalance the levels of vocals, bass, percussion and the remaining instruments using the machine learning capabilities of Music Rebalance. In practice you can only do this to a degree — depending on the source — before introducing artefacts and degrading the signal. Subtle changes are certainly within the reach of this algorithm. With the right amount of stereo separation and instrumentation one can produce more exaggerated results. It is extremely difficult to cleanly remove or isolate any of the instrument groups without artefacts. A practical use might be in a post environment where a song with vocals is interfering with dialogue. In music scenarios expectations should be restrained.

The new Variable Time permits users to adjust time while retaining pitch, Ambiance Preservation has now been added to Dialogue Isolate, Breath Control is now available as a real-time plugin, multi-channel support is finally available and all floating windows can be closed with a keystroke. iZotope RX 7 is a massively worthwhile upgrade. It's hard to imagine any serious working professional not including it in their toolkit. ⓡ

resolution/**VERDICT**

PROS   Dialogue Contour is a hit! Dialogue De-reverb is extremely useful and multi-channel support is welcome.

CONS   Music Reblance is not yet a fully mature process. Low quality preview in some modules.

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