

MULTICHANNEL SUPPORT
RX 7 supports up to 7.1.2 Dolby Atmos

DIALOGUE CONTOUR
Alter vocal inflections over time

VARIABLE TIME
Now you can adjust time flow without affecting pitch

MUSIC REBALANCE
Extract or remove vocals and more!

REPAIR ASSISTANT
Intelligently fix common issues

DIALOGUE ISOLATE
Now included as an AudioSuite plugin

PREVIEW
Certain modules are auditioned using Reduced Quality Preview

OPACITY
Balance the visibility of the waveform and spectrogram

DIALOGUE DE-REVERB
Dry out spoken word material

VARIABLE PITCH
Make pitchshifting curves without affecting time

COMPUTER MUSIC PERFORMANCE Award

COMPUTER MUSIC INNOVATION Award

iZotope RX 7

PC MAC

£1069/£229/£99

The innovations just keep on coming with the seventh generation of this ever-expanding spectral editing and audio restoration suite

> In 2016, version 6 of iZotope's spectral audio editor and repair/restoration plugins suite (VST/AU/AAX) introduced machine learning to its technology base alongside a range of miraculous new modules, including De-wind, De-noise, Mouth De-click and De-rustle. Like every version before it, it scored 10/10 in **cm245**.

RX 7 adds a handful of new modules, as well as an 'Assistant' of the kind found in iZotope's other flagships, Neutron and Ozone. We're looking at the top-of-the-line Advanced version here, but there's Standard edition (£299), which loses multichannel functionality and various dialogue-related modules, and RX 7 Elements (£99), which is decidedly lighter, feature-wise. See the iZotope website for a full comparison and upgrade pricing.

You're surrounded

With RX 6, our only real complaint concerned the software's continued lack of support for

multichannel audio, but we can happily report that this has been addressed: RX 7 Advanced supports multichannel processing up to Dolby Atmos 7.1.2. Channels can be viewed and edited separately or collapsed down to a group for collective processing. Very nice too.

Given recent iZotope history, there was no way RX 7 *wasn't* going to get an automated

"Given recent iZotope history, there was no way RX 7 *wasn't* going to get an automated helper of some sort"

helper of some sort, and Repair Assistant (all editions) is geared up for automatic fixing of sub-par recordings. An integrated function of the audio editor, rather than a module, it specifically does away with clipping, clicks, hum and noise, in three source material modes: Dialogue, Music and Other. With your audio region selected, clicking the Start Analysis button 'intelligently' creates three corrective processing chains (or three variations on a single chain in the Standard edition) using the appropriate modules (De-noise, De-click, De-hum, etc), presented as ten-second previews with unhelpfully tiny spectrograms. The specifics of each chain are revealed by hovering the mouse pointer over them, and the chains themselves are accessed for tweaking, if necessary, at a click. With RX 7 Advanced, lower- and higher-intensity versions of each chain can also be generated, and each of the four 'issues' can be bypassed in the Preferences if not

“It confidently handles total isolation or removal of those track elements, too – remixers will love it”

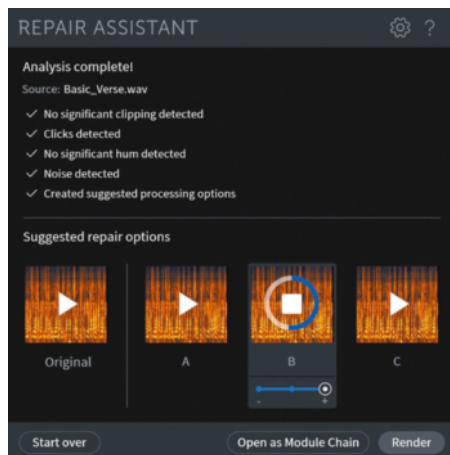
needed. How successful Repair Assistant is depends entirely on the nature of the source material. With dialogue, it almost invariably does a great job, which shouldn't come as a surprise given the fairly rudimentary nature of the problems it addresses. With musical material, things are less clear cut. Clipping, hum and noise are well handled, but you might want to disable click detection, as it sometimes attempts to kill 'clicks' that are actually percussive transients in the source material.

Repair Assistant is a solid timesaver. Given that it's just setting up the existing modules for you, however, it doesn't offer anything qualitatively 'new' in terms of end results.

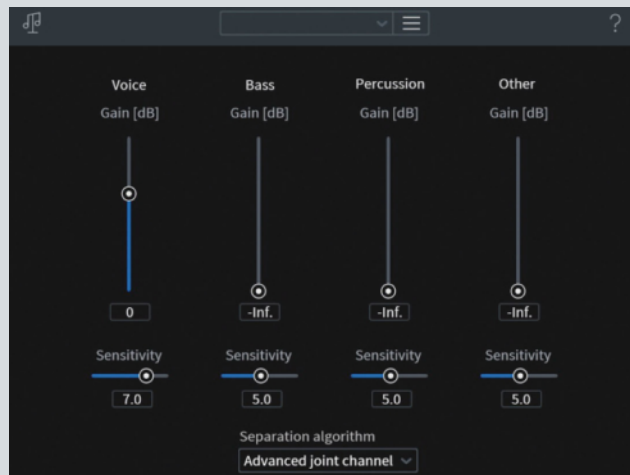
Talking therapy

On to the new modules, then. First up, Dialogue Contour (Advanced only) is essentially a multi-breakpoint pitch modulation envelope optimised for spoken word material. The waveform and spectrogram of the region currently selected in the audio editor appear in the module, where nodes are added and moved around to apply pitch inflections over time, with the Formant Scaling slider compensating for any unnatural sounding changes in timbre. Dialogue Contour doesn't wow us – its usable range, before obvious artefacts start to creep in, is so short that only very minor intonation adjustments are really viable.

A more targeted version of the established De-reverb module, Dialogue De-reverb (Advanced only) uses machine learning to melt reverberation away from spoken word recordings. Applied as an offline process (with Reduced Quality preview), it's very effective, although as with all dereverberation processes, its effectiveness largely depends on the depth and tail length of the 'verb. The Ambience



Repair Assistant saves you the trouble of denoising, dehumming, declipping and declipping manually



Music Rebalance uses machine learning to work minor miracles

The music sounds better with you

The highlight of RX 7 is the new Music Rebalance module (Standard and Advanced), which uses machine learning to divide mixed tracks into four constituent components – Voice, Bass, Percussion and Other – each of which can then be independently levelled in a simple mixer, by up to +20dB or all the way down to silence.

Perfection is never to be expected with deep spectral processing like this, but damn, Music Rebalance is impressive. Not only is it hugely effective for boosting or lowering drums, basses and vocals/voiceovers within the mix, but it confidently handles total isolation or removal of

those track elements (vocals, most importantly), too – remixers will love it.

Sure, there are inevitably artefacts and spectral 'holes' in the retained material – how could there not be? – but they're nowhere near as pronounced as we initially expected. It's genuinely amazing and a remarkable achievement on iZotope's part.

Being an offline process, it's worth noting, Music Rebalance is only available within RX 7 itself (there's no separate VST/AU/AAX plugin) and as an AudioSuite plugin for Pro Tools. It does, however, include a ('Reduced Quality', as demanded by the latency of the algorithm) preview function.

Preservation control proves useful when the algorithm misinterprets desirable background noise (traffic, crowds, etc) as reverb, though.

The Variable Time and Variable Pitch modules let you draw independent timestretching and pitchshifting envelopes along the timeline, just like Dialogue Contour, with controls for reducing 'phasiness' and preserving transients. Like the 'static' Time & Pitch module, these are applied and auditioned offline.

Lastly, Pro Tools users will no doubt enjoy the AudioSuite versions of De-rustle, Dialogue Isolate and Music Rebalance (see *The music sounds better with you*), enabling those modules to be employed (albeit offline, of course) directly in their DAW. And De-rustle and Dialogue Isolate can now be previewed without having to use the Compare dialog, again at lower quality than you get from the final render.

As an upgrade from v6, RX 7 would score 8, losing points for the narrow operational range of Dialogue Contour and the fact that half of the new stuff only comes with the Advanced edition. But Dialogue Contour is just one module of many, and given that RX 6 would still be a clear 10 had RX 7 not come along, we'd definitely award its successor the usual full marks as a solo proposition. **cm**

Web www.izotope.com

Alternatively

Magix SpectraLayers Pro 5
NA » NA » £299

Powerful audio editor featuring Spectral Casting, Spectral Molding and much more

Steinberg WaveLab Pro 9.5
NA » NA » £480

The veteran professional audio editor also features plenty of spectral functionality

Verdict

For Music Rebalance is brilliant...

...as are Dialogue De-reverb, Variable Time and Variable Pitch
Still the best audio restoration, repair and spectral editing package around

Against Standard edition isn't that big an upgrade over RX 6
Dialogue Contour is underwhelming

Version 7 is the best RX yet, although the 6-7 upgrade isn't quite essential

9/10