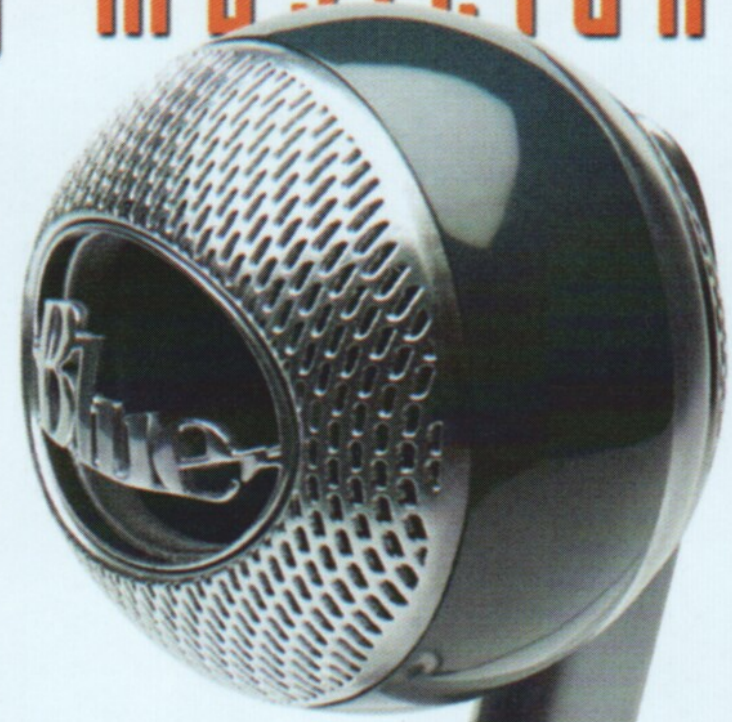
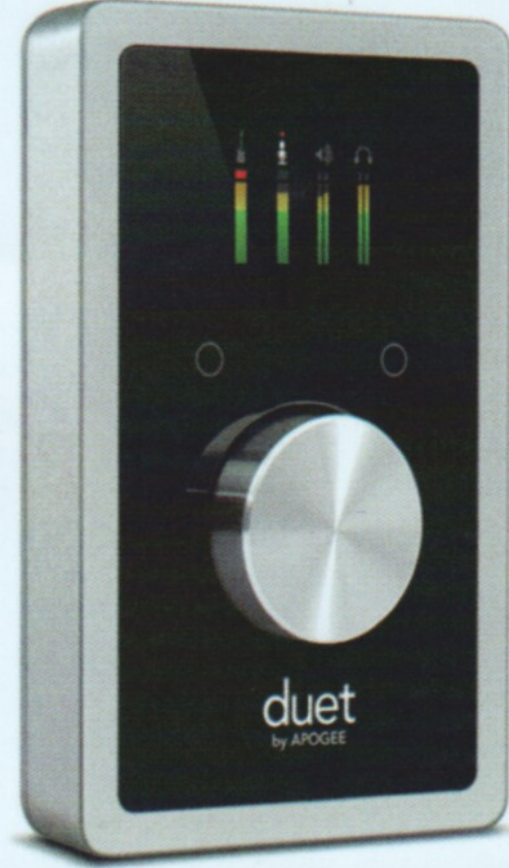


Depeche Mode: Anatomy Of A Hit Single Remix

# RECORDING

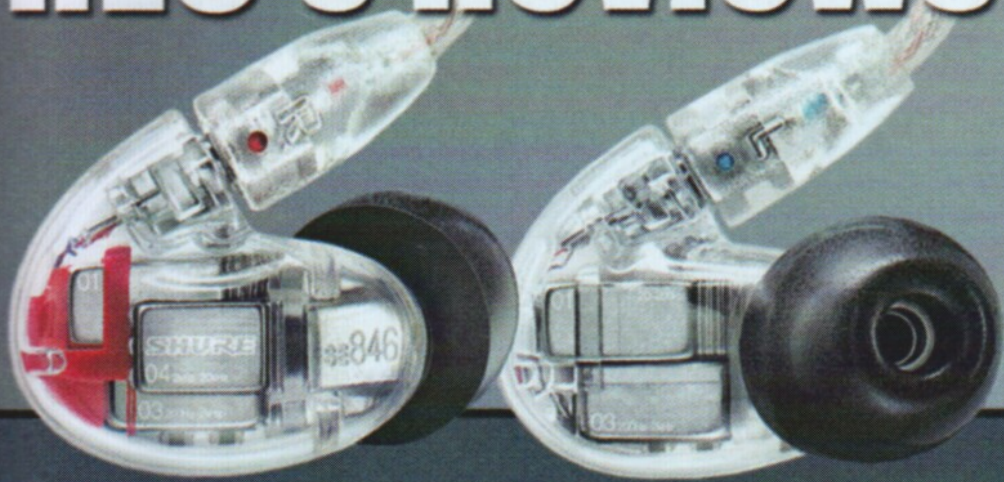
The magazine for the recording musician®

## GREAT & GIFTS & GEAR



REC's Reviews

of 26 Hot New Products:



**AIAIAI - Apogee - Blue - Bock Audio - CAD Audio - Eventide - 8Dio  
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Royer Labs - Shure - Sonnox - Sony Creative Software - Gefen**

New  
Headphones:  
Believable Audio, or just  
Bass Boost and Bling?



VOL. TWENTY SEVEN  
NUMBER THREE

\$5.99US \$5.99CAN



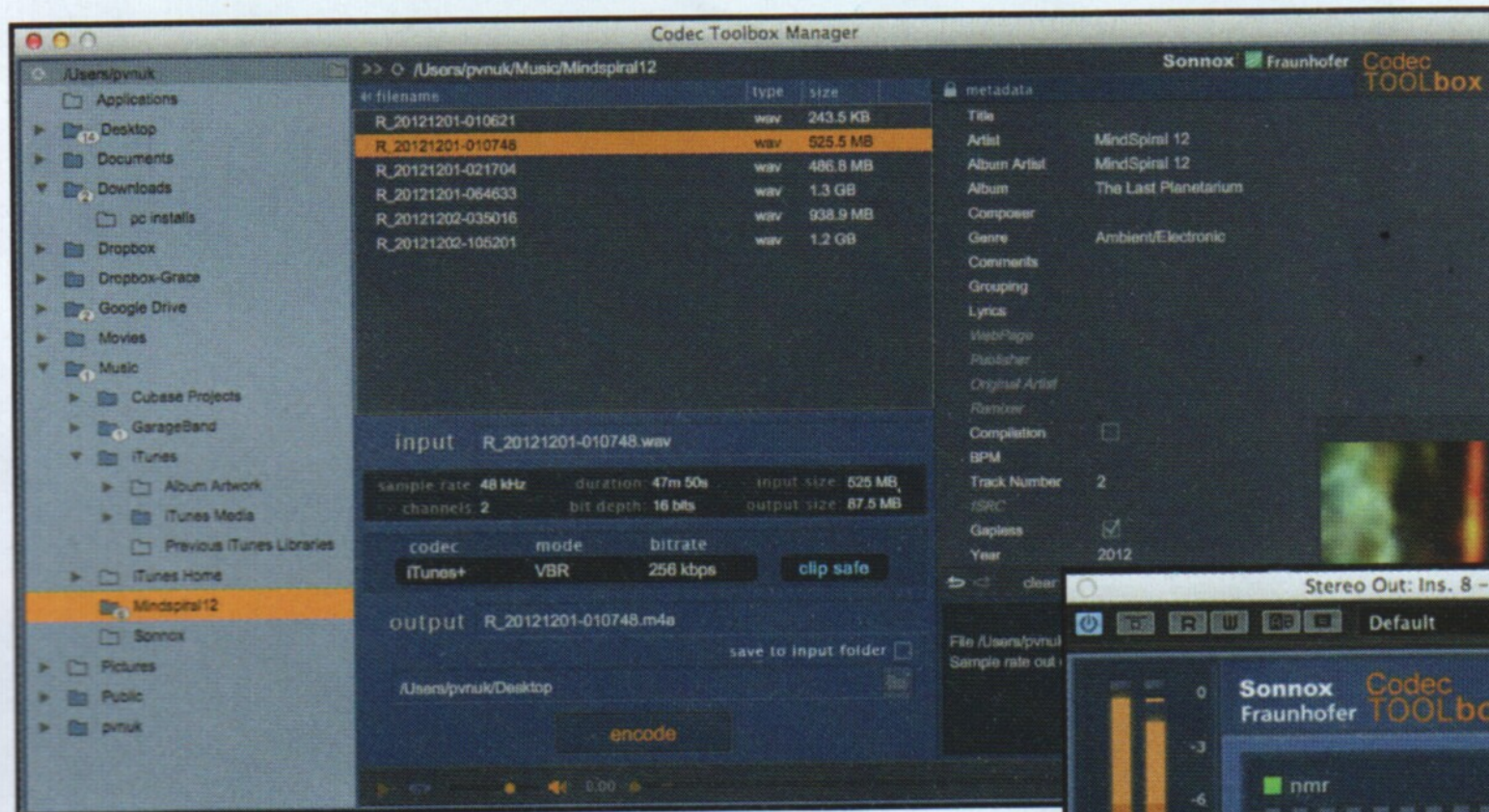
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USA \$5.99  
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Tame That

Low End!

What Really Works In Small Studios



35 pounds (about \$59); [www.sonnox.com/ctb](http://www.sonnox.com/ctb)

The Codec Toolbox from Sonnox is both a plug-in and standalone software application that allows you to audition your finished mixes through various audio compression codecs such as MP3 and AAC in real time, and then encode them for Internet distribution.

Developed in conjunction with the folks at Fraunhofer IIS—otherwise known as “the guys who invented MP3 and (in conjunction with Apple) AAC”—the Codec Toolbox is an affordable baby brother of the Sonnox Fraunhofer Pro-Codec which we reviewed back in November of 2011. Even more so now than 2011, MP3 and AAC are here to stay, and I don’t think it’s a stretch to say that all of us, whether musician or audio engineer, will have our music eventually end up in one of these formats.

The original Fraunhofer Pro-Codec plug-in is one of the first of its kind to allow you to take control of the process and allow you to listen to your mix through multiple lossy and lossless formats. It also includes a feature to allow you to do your auditions with an ABX multiple-choice blind taste test. Since it is a plug-in that could be placed on your master bus, you could make informed sonic decisions with respect to your mix and then choose the best bit rate and codec.

Another huge feature of the Fraunhofer Pro-Codec is the ability to make sure that no digital clipping would occur as a result of the encoding process. I should also note that included in last year’s version 2 update of the Pro-Codec was the ability to produce Mastered For iTunes-ready renders. Good stuff... but there’s one small hitch, and that’s the price. While the Fraunhofer Pro-Codec plug-in is an indispensable tool for mastering engineers, at \$499 it is a bit out of reach of the average studio and home hobbyist... and that’s where the Codec Toolbox comes in!

The Toolbox plug-in, like its big brother, allows you to choose and audition your mix in real time through one of the following codecs: MP3, AAC-LC, HE-AAC, HE-AAC v2, MPEG Surround, and Apple AAC (iTunes Plus; Mastered for iTunes) (Mac only). The Codec Toolbox supports mono, stereo and even 5.1 depending on the codec.

In the main plug-in window you can choose your codec, its mode (Constant or Variable bitrate) and the actual bit rate, up to 320 kbps (or lossless when using HD-AAC). Unlike its big brother, the Codec Toolbox will only work with and support sample rates of 32, 44.1, or 48 kHz, so if you are working with high-sample-rate audio you will need to downsample first. It can input data from both 16- and 24-bit files, but dithers 24-bit files to 16 before processing them.

There are three main tools in the plug-in. First is a -40 to 0 dBFS input meter, calibrated to -12 to 0 dBFS for higher resolution. Sonnox is quick to point out that since the plug-in dithers to 16-bit, the red clip light indicates hard clipping at the input stage.

Two other meters on the interface are post-encoding. The first is labeled NMR, which stands for Noise-to-Mask Ratio and is a light version of the full scale FFT meter in the Fraunhofer Pro-Codec. This meter lets you know when the high-end or low-end information of your

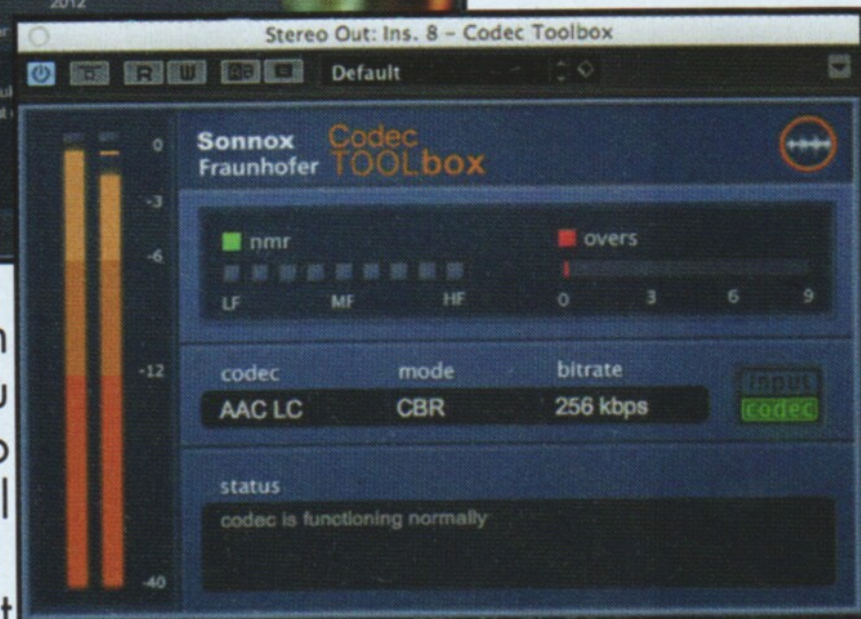
recording is being affected by the processing. The last meter is the Overs meter, which lets you know when the processing is inducing overs and clipping so you can turn your mix down accordingly.

Unlike the plug-in-only Fraunhofer Pro-Codec, the Codec Toolbox features two parts... not only the Toolbox plug-in discussed above, but also a standalone program called the Toolbox Manager. This is where the file encoding happens and where you choose, tag and encode your file or files. Yes, I said “files”! This is exciting, as unlike the original Fraunhofer Pro-Codec, the Codec Toolbox can do full-on batch processing.

Other handy features include the ability to see what the final encoded size of your file will be prior to encoding, as well as a feature called Clip Safe that when active pre-scans your file for encoded overs and then auto-compensates the volume in the rendering pass.

Like all of Sonnox’s wares, Codec Toolbox requires a PACE iLok account. However, thanks to the latest iLok software, you do not need an actual iLok USB key—you can use one if you have it, or authorize the software for a specific computer. It’s your choice.

Sure, Codec Toolbox doesn’t handle direct processing and encoding of hi-rez audio, and it lacks the detailed metering, analysis and ABX comparisons of



the Fraunhofer Pro-Codec. But whether you’re creating and sending MP3 mixes to clients, rendering low-rez AAC for Internet broadcast, or just want a controllable, musical alternative to using iTunes or Windows Media Player for creating your

lossy audio files, at just shy of \$60 this is a great tool to have beside your DAW. Honestly, since getting it I have been using it more than the Fraunhofer Pro-Codec, as it’s just so simple and convenient! —PV