FaulknerDownsample

Contents

FaulknerDownsample is supplied as a zip file, faulknerdownsample.zip. When unzipped it should contain:

> FaulknerDownsample.exe
> CT_Pro.dll

and this information file.

Description

FaulknerDownsample applies the adjacent sample averaging technique developed by Tony Faulkner to downsample (decimate) 24-bit packed integer Wave files by a factor of two or four. It is particularly suited to the downsampling of 88.2 or 176.4kHz material to 44.1kHz, or 96 or 192kHz material to 48kHz.

System requirements

FaulknerDownsample should run under any Windows 32-bit operating system, from Windows 95 onwards. It has been tested on Windows 95, Windows ME and Windows NT4.

To run, FaulknerDownsample requires that the supplied CT_Pro.dll be installed in the same directory as the executable. This file contains the runtime files of Perfect Sync Inc's Console Tools Pro (http://perfectsync.com) which provides enhanced control over the console window's appearance and function.

Operation

FaulknerDownsample's operation is self-explanatory. It first asks you to identify the Wave file to be processed. This can be mono or stereo but must be in 24-bit packed integer format. A modest amount of error trapping is included in the code to prevent the processing of files which don't meet this description. If the specified file passes these tests, its details (number of channels, sample rate, resolution, length and duration) are displayed. The program then asks you to specify the desired decimation ratio (which must be 2 or 4) and a name for the output file (which must be a full path, complete with .wav extension). Execution then begins.

If the Wave file is small enough for processing to take place entirely within your computer's spare RAM, the reading/processing/writing operations will typically be completed very much faster than the real time play length of the file. If virtual (hard disk) memory has to be used then the operations will take much longer. Intensive hard disk activity is an indication that this is occurring.

For a more detailed description of Tony Faulkner's downsampling technique please refer to the article I wrote on the subject for *Stereophile*, published in the January 2004 issue of the magazine.

Licence

This software may be freely distributed provided that it is unaltered and distributed in its entirety, including the supplied DLL and this information file. It may not be used for any commercial purpose, including the processing of audio files for CD or other for-profit release. No support or warranty is implied or given: this software is supplied 'as is' and you use it entirely at your own risk. If you encounter any bugs or have suggestions for improvements you are invited to post them via freeware@audiosignal.co.uk.

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