

INSTRUCTIONS FOR EQ FILTERING

VERSION 4 - MARCH 2021

This program applies custom equalization (EQ) filters to audio stimulus files for use with Sensimetrics' MRI-compatible earphones. The program runs only on Windows-compatible PCs.

BEFORE USING THE PROGRAM

Copy the custom EQ filters for your earphones from the top folder of the thumb drive (provided with your earphones) to your computer's hard drive. The left and right filters are contained in files named *EQF_xxxx.bin* where *xxxx* is the serial number of an earphone.

STEPS IN USING THE PROGRAM

Start the program by clicking on the EQ Filtering icon that was installed on your desktop.

Select the EQ filters by clicking the buttons under EQ Filters and then navigating to them.

Select audio files for processing using the Files to Process box. Click the Add button to navigate to folders containing your audio stimulus files. Select the files and they will be added to the list in the box. If you wish to remove files from the list, select them and then click Remove. Click the Remove All button to clear the list.

The program accepts .wav files (only) at any sample rate and bit depth.

Choose output settings:

Use the Mono Input To selector to specify whether a mono input signal should go to the left or right channel only, or to both channels, of the output file.

Use the Filename Modifier to specify either a prefix or a suffix to be attached to all processed filenames. An underscore character '_' will automatically be added to separate the modifier from the input file name. For example, if you have a series of files named noise1.wav, noise2.wav, etc, and you specify a prefix of 'proc', the output files would be named proc_noise1.wav, proc_noise2.wav, etc. The same modifier as a suffix would produce noise1_proc.wav, noise2_proc.wav, etc.

Click Select Output Folder to specify where all the processed output files will be stored.

Start the processing by clicking Start. The time needed for processing will depend on the number and size of the audio files to be processed, and the speed of your computer. Status will report progress and completion.

NOTE: There will be a limit to the length of signals that can be processed by EQ Filtering. On typical modern PCs that limit will be on the order of a few minutes (for a two-channel signal). The exact limit depends on the total number of samples in the signal and the amount of memory in your computer.