NMFx

Overview

Whilst dramatic sound with wide dynamic range and pounding bass is very enjoyable in a movie theatre, it is not always practical in the home due to the risk of disturbing sleeping children, other family members or neighbours (e.g. in an apartment block).

Turning the sound level down usually results in difficulty in hearing the quiet passages of dialogue leading to a frustrating and unenjoyable experience.

NMFx solves both these problems by managing the sound level to reduce very loud sounds whilst boosting speech intelligibility and the ability to hear quiet sounds.

In addition *NMFx* can prevent hearing damage whilst listening in a noisy environment by providing a more consistent sound level.

Features

- Applies gain for quiet signals (e.g. whispered speech/talking quietly etc) whilst applying attenuation for loud signals

- Controls the amount of bass transmitted

- Dynamic range reduction up to 20dB

- Multi-band 'Musical' sound does not adversely affect tonal balance of music

- Proprietary gain ballistics avoid 'pumping' sound

- Works on all material including movies, music, speech, documentary, drama etc.

NMFx in use

The loudness plots below are made from a variety of material digitally captured from movies (including sound effects) and broadcast TV (including speech, music and advertisements):
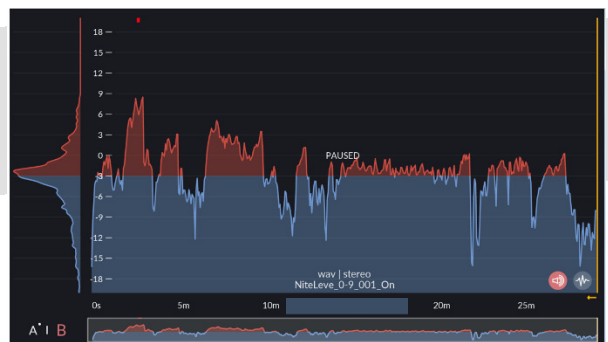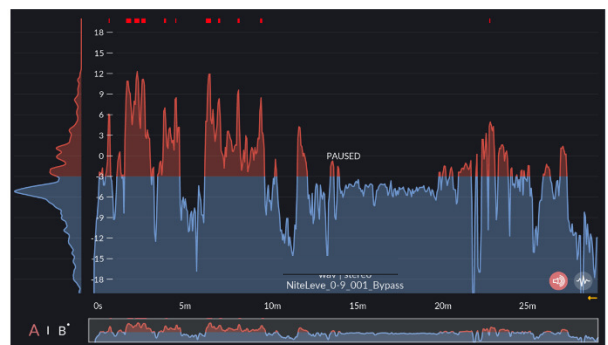
NMFx On

Plots in this case show reduced loudness-unit peaks and amplified low volume sections reducing range in this instance by ~10.8dB loudness units

Applications

- Active speakers
- Soundbars
- TVs
- AV Receivers
- Ear buds
- On ear headphones

NMFx

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D I G I T A L

NMFx Evaluation

NMFx can be evaluated as a time-limited PC App once an NDA has been executed.

The UI is shown below:

Availability

NMFx is available as single precision floating point C source code but can also be ported to fixed point C or low-level assembler code if required.

Contact details

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