

Term Project Files

File name: lotr_distorted.wav

File name: starwars_distorted.wav

Sampling frequency: 11025 Hz

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Number of samples: 92544

Number of samples: 203712

Clean/noisy threshold: 0.10

Clean/noisy threshold: 0.15

Notes

- The threshold values assume:
 - 64 channels
 - Power computation by blocks of 80 samples in each channel
 - Power of each block = $\sqrt{\frac{1}{80} \sum_{n=0}^{79} b[n]b^*[n]}$
- Useful file i/o functions:
 - `x = audioread('filename.wav');`
 - `audiowrite('filename.wav', output_array, sampling_freq);`
- Root raised cosine filter: `h = firrcos(N, Fc, DF, Fs)`