

Active Noise Control of Speech in Headphones

using Linear Prediction

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Acoustics and Audio Technology - Fall 2016
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Agenda

Active Noise Control of
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Linear Prediction
Group 761

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Methods

Adaptive Filtered-x least
mean squares FIR
algorithm
Wiener filtering

Results

Simulation

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Computation

Conclusion

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► Counterphase signal

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► Frequency dependent attenuation

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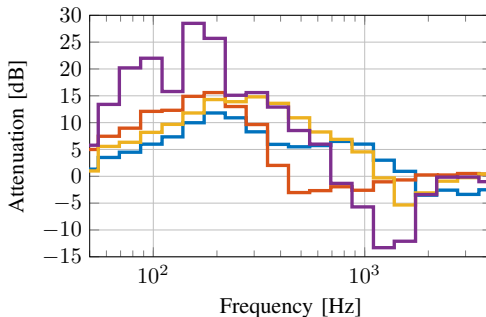
Computation

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- ▶ How well does the consumer headphones attenuate?
- ▶ We have tested
 - ▶ Denon AH-GC20 – 2.200 kr (2016)
 - ▶ Bose QC25 – 2.799 kr (2016)
 - ▶ Bose QC15 – 2.696 kr (2011)
 - ▶ B&O H8 – 3.495 kr (2016)





Opbygning

Decimator

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