Active Noise Control of Speech in Headphones

using Linear Prediction

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Acoustics and Audio Technology - Fall 2016
Department of Electronic Systems
Aalborg University
Denmark





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What is Active No Control (ANC)

Present cons headphones

Method:

Adaptive Filtered-x leas mean squares FIR algorithm

Wiener filteri

Results

Simulatio

Computati

Computation

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Acoustics and Audio Technology Dept. of Electronic Systems Aalborg University Denmark ► Counterphase signal



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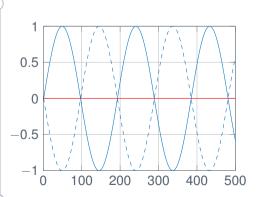
Results

Simulation

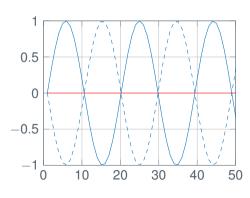
Computatio

Conclusion

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- Original signal
- - Counterphase signal
- Error





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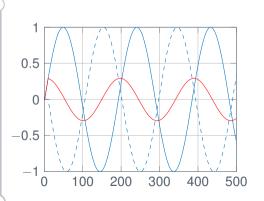
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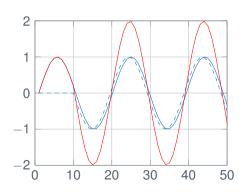
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Acoustics and Audio Technology Dept. of Electronic Systems Aalborg University Denmark ► How well does the consumer headphones attenuate?

► Denon AH-GC20

2.200 kr (2016)

▶ Bose QC25

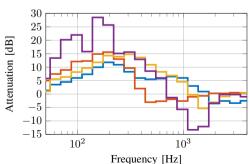
2.799 kr (2016)

► Bose QC15

2.696 kr (2011)

► B&O H8

3.495 kr (2016)





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