

ENERGY-DECAY BASED POSTFILTER FOR ICC SYSTEMS WITH FEEDBACK CANCELLATION

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Abstract: In so called In-Car Communication (ICC) systems the most challenging problem is feedback that occurs when a recorded and amplified signal is played back and recorded again. This electro-acoustic loop restricts the maximum gain that can be applied in such system until it gets unstable. There are different solutions to increase the stability of ICC systems. One is to use model-based feedback suppression. Another is to use cancellation approaches as they are well established in hands-free systems to reduce echo.

In this paper, we propose a postfilter based on a modified energy-decay model that is used in combination with feedback cancellation.