

A Compound Near-Far End Least Square-Fourth Error Minimization Foradaptive Echo Cancellation

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Summary

This article presents a novel algorithm for echo cancellers with near-end and far-end sections. The algorithm consists of simultaneously applying the least mean square (LMS) algorithm to the near-end section of the echo canceller and the least mean fourth (LMF) algorithm to the far-end section. This combination results in a substantial improvement of the performance of the proposed scheme over the LMS algorithm in Gaussian and non-Gaussian environments (additive noise). However, the application of the LMF and the LMS algorithms to the near-end and the far-end sections, respectively, results in a poor performance. Simulation results, confirm the superior performance of the new algorithm

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