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Blind identification and equalization of two-channel FIR systems in unbalanced noise environments. (English) [Zbl 1148.94395](#)
[Signal Process.](#) 85, No. 1, 215-225 (2005).

Summary: Blind identification is a very significant problem in many contexts where only the output of transmission channels can be observed. The solutions that can be found in the literature are limited to the case of equal amounts of additive noise on the observations. This paper proposes new identification procedures that can be applied to the case of two FIR channels affected by unknown and unbalanced amounts of additive noise. The identified models are then used for the minimal variance deconvolution of the unknown input signal. Several Monte Carlo simulations also confirm the good performance of these procedures in severe SNR conditions.

MSC:

[94A13](#) Detection theory in information and communication theory
[93E10](#) Estimation and detection in stochastic control theory

Cited in **3** Documents

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[blind identification](#); [blind equalization](#); [linear systems](#); [FIR systems](#)

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