

# ALGORITHMS AND DEVICES FOR INPUT SIGNAL IDENTIFICATION IN PROBLEMS OF DYNAMIC OBJECT CONTROL AND DIAGNOSTICS

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The paper deals with the problem of separation of individual signals from the additive mixture of several signals, i. e. the problem of signal identification. Two groups of algorithms for solving the problem are analysed: those based on the knowledge of channel properties and the knowledge of signal source properties. The results of modeling the algorithms under consideration are given as applied to the problem of controlling data transmission rail channels widely used in railway transport.

*Channel, signal restoration, signal separation, inverse filter, adaptive filter, multichannel adaptive filter, incorrect problem, stability, regularization, regularization parameter.*

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