Development of audioscrambler for protection during audio signal transfer

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Ensuring confidentiality is always on the first place. Thus the goal of this work is to learn and investigate the efficiency of protection method, based on scrambling technologies and used mostly for audio signals in public analog channels. Software and hardware solutions, using field-programmable gate array (FPGA) technologies and integrated circuits hardware description language (VHDL) are in the area of interest.

Theoretical and experimental research series were conducted, before the optimal solution, taking into account technical features and parameters of the hardware and software components of the scrambler, was chosen. The working prototype, implemented on the field-programmable gate array integrated circuit (FPGA) Altera Cyclone II Starter Kit, designed using integrated circuits hardware description language VHDL, is proposed as a result relied on the research.

Keywords: audioscrambler, information security, the scrambler.

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