

Project Title

Audio pitch shifting and transmission through optical fiber

Team Members

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Description

The goal of the project is to modulate incoming audio and then transmit the modulated signal through an optical fiber into a speaker. We want to focus on real time pitch shifting of incoming audio, whether that be a single tone, music, or voice. Our system will include adjustable filters, allowing the user to select their desired modulation. For example, a person can choose to make their voice sound higher or lower pitched. After modulating the signal, the audio will be amplified and then transmitted through an optical fiber, with the appropriate receiver and transmitter circuitry, to a speaker. Time permitting, we will implement our final version of the circuit on a printed circuit board.