

6.101: Final Project Abstract

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Title: NTSC Transmission through Optic Fiber

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The National Television Standard Committee was developed in 1941 and had no provision for color. In 1953 a second NTSC standard was developed to allow for color TV transmission. It was widely used up to 2010, when it gradually became replaced with different digital standards. For our final project, we will implement a scheme to transmit and receive NTSC video and audio signals through optic fiber. The transmission of video and audio signals across optic fiber have been done using digital transmission standards; our project will take an old standard and transmit it across a new medium. The project will be divided into a transmission unit and a receiving unit. The transmission unit will include an audio modulator, a video modulator, and a diplexer. The diplexer signal will be transmitted and received via an optical fiber medium. The receiving unit will consist of the necessary filters to demodulate and split the received signals into separate audio and video signals, which will be displayed on a television unit provided by the lab.