Thesis TitleComputer control signal transmission via optical fiberStudentsMr. Khanung RadrodkidThesis AdvisorAssist.Prof. Apinun ManyanonLevel of StudyMaster of Engineering in Electrical Engineering
King Mongkut' s Institute of Technology LadkrabangYear1998

Abstract

This thesis describes a design and construction of control system for signal transmission system via optical fiber. The system can be used to send the control signal from one station to remote station and receive the response signal from remote station in a half duplex intercommunication. The controlling signal consists of the command and data signal , which is generated and transmitted to control various factors such as : pressure , temperature , position (both rotary and linear) and etc.. To match the system output with DC voltage of sensors, the control signal transmission system is controlled by computer. Experimental results illustrate the feasibility of applying the proposed automatic control system for home automation and factory control system.