ABSTRACT

During the increasing of the theft and the limited actions of security personnel, the necessary precaution is creating a security system equipment. Reliability and economical security system equipment are needed in the implementation of security enhancements. Therefore, this final project describes about the design of the security system equipment that can be controlled trough the control computer with an IP-based networks (Internet Protocol) and microcontrollers. The purpose is to facilitate the security officer in performing his duties to monitoring each room.

In this final project, the microcontroller that used is AT Mega 8535. The signal input is infrared. Microcontroller communicates using ports that connected to the lamp output and servo motor webcam drivers. WIZ110SR module is gateway used as a microcontroller with the network before connecting to a computer user. The users can perform monitoring using a PC that connected to the network as a remote device. On the PC, the users can change the direction of webcam based on the program that has been created.

Key Words: *user*, *network, mikrokontroler, motor servo*