

ABSTRACT

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A CONSTRUCTION OF ROOM CONTROL AND MONITORING SYSTEM BASED ON LAN

(xiv + 48 pages: 33 figures; 5 tables)

A building used as an office usually has many electrical devices. Certainly it is very difficult to control an electronic device that is stored in each room as well as securing a room in certain circumstances, especially if the building is spacious and has many room and levels. To overcome these problems, we can use a tool that works as a virtual remote control.

The main purpose of this research is to make a prototype system that can be used for controlling electronic device based on LAN as well as for room surveillance by using an IP camera as monitoring device. This system includes a modification of an electrical socket, relays and microcontroller. The microcontroller integrated with a network module so that it supports TCP/IP.

The evaluation shows that the prototype can be use as a real time monitoring system over an IP Camera. It can also be use as a control system of an electrical device by using simple electrical circuit. The system can be access through a system monitoring website over LAN.

Reference: 21 (2005-2010).