

## ABSTRACT

The case of home burglary is very often reported in mass media. According to Chief Police of Metro Jaya Putut Eko Bayuseno, the number of home burglary between August – September 2013 in Jakarta was 60 cases. And that case has been become highest rank of criminality. The manner to protect the house is also varied. Based on data from the public and the police indicate that are impacting less as solution to protect and reduce the acts of home burglary.

This Final Task has been successful designing and realizing a system that is able to provide a broadcast warning alert to the owner's personal phone or anyone who has access right. The warning alert is in form of the Call and Short Message Service (SMS). As main trigger, this system always observes the sensor status. This system also be run in real time and accompanied by the capture result from camera in form of video stored in external memory.

This system created is a microcontroller system that consist of two main sub-systems, namely Sub-Central Unit (SCU) and Sub-Sensor Unit (SSU). This system also provide an interface is easy enough that is control panel in form of Liquid Crystal Display (LCD) and keypad. That control panel are able to help the administrator to operate the menus in system that are able to support the level of flexibility, condition, and different requirements. This system is also equipped by additional control application that is able to used on android platform by related administrator. That additional control application is expected able to provide simplicity for the purpose of authentication and main control functions, also increasing mobility of the administrator.

This system will be expected can be one alternative for home security system that better than system existed and will be right solution to reduce home burglary.

**Keywords** : broadcast warning alert, microcontroller, authentication, real time, platform.