ABSTRACT

Safety factor at this point is of great concern by the community. Levels of theft also increased along with the increases of need to live. The price of primary needs are increasingly and termination of employment which increased the number of unemployed. Therefore, we need a security device on a motorcycle better than the previous ones to reduce the increasingly high levels of theft.

This security device in this final project using a microcontroller as the regulator and data processing. Sensors are the feeder of the input signal which will be processed by the microcontroller will activate the warning signs oh alarm system. The sensors used in this final project are ultrasonic sensors and infrared sensors. Where the infrared system will detect any movement of the motorcycle and the ultrasonic sensors will detect any chenges of reflection of the distance if the motorcycle was lifted. After detected the disorder, these sensors will changed the voltage level's that would be changed into digital signals, so both these sensors will sent input values to he microcontroller which will activate the alarm system.

The end result of this final project will produce a series of tools that have a specification of three sensors connected to the microcontroller. Then the microcontroller will be connected to a alarm device which is already available.

Keywords: microcontroller, infrared sensor, ultrasonic sensor, alarms