ABSTRACT

Along with the progress of time, the level of human needs will also be growing. Likewise in the field of transport, especially motorcycles. From the data obtained statistical motorcycle purchase rate increased rapidly from year to year and is directly proportional to the level of theft is very rife in society. This will make us more alert to improve security systems on motorcycles that are used.

Many ways that have been done include using a double lock, padlock or alarm, but some of these ways can not overcome the rampant motorcycle theft that occurs nowadays. Therefore, in this final project is designed a tool that can minimize the criminal act. Each time a motorcycle will be used, the user is required to input a password on the keypad that has been provided or by sending a text message from the user number. If the procedure is not performed then the designed device will automatically cut off the battery from the battery and alert the alarm (by honking) then the sms gateway and GPS module will update the location of the motorcycle to stop every 5 minutes. The result of GPS communications that coordinates will be sent via short message to the number of users who can be directly opened through google maps or google earth via smartphone vehicle owners.

In this Final Project has designed a tool to know the position (location) of the vehicle through the point coordinates with GPS and anticipate the act of theft by disabling the motorcycle and provide a horn alert. From 10 times the experimental results of this tool can detect locations with 100% accuracy and message delivery time with a delay of 0 minutes to 1 minute.

Keywords: GPS, keypad, buzzer, relay, microcontroller