ABSTRACT

Future technological developments without realizing it, almost all human beings need a tool vehicle. The last few years this action has included high car theft. Because of that car owners are required to take special care in parked and when left by the owner. Cars are often the target of the target of thieves who cause unrest and material losses.

Security Systems in the process of designing this car to be used is the circuit system using Arduino Uno microcontroller, sim900 module as the recipient of the SMS sent from the mobile user. Also installed GPS trackers or giving the coordinates for the user. And Relay as an output that is connected directly to machine for a car to switch on / off the engine and lock the doors. With the support of software in creating programs such as Arduino.

Results of this final project to monitor the car's position using GPS and can also turn off via sms sent to the module gsm sim. The system captures the coordinates of the GPS in the car after it shut off the engine. Automatic car locked from the inside and the alarm sounds. GPS system works when the security system has been activated for 10 minutes. Relay will light up when the car was brought already in a state of lock system at a distance of 100m from the point of initial coordinates. Then the GPS system error readings are percentages of 91.32% and error 9.50%.

Keywords: Security Systems, GPS, SMS, Arduino Uno, Relay