ABSTRACT

Vehicle security nowadays is needed to reduce criminal cases such as theft. But security systems like an alarm, or double lock system still does not guarantee the security of the vehicle. Therefore, we need a security system on a vehicle that is better than before. In this research, designed a vehicle tracking and safety system consisting of Arduino Uno ATmega328, module GPS, Modul GSM, and Relay Circuits. Arduino Uno ATmega328 serves to control the input and output of the security system of the vehicle. GPS module serves as a device that is able to show the existence of vehicles based on latitude and longitude positions in accordance with satellite data. A GSM module to send a warning message when a theft occurs and the message contains the coordinates of the position of the vehicle. A series of Relay is a component of electronics that aims to shut off electricity the vehicle. Based on the results of the testing that has been done, in conditions of danger without pressing the key secret. The system will run and electrical vehicles will be terminated by the relay in the pause time is 15 seconds. Then proceed with the delivery of the first message in the form of a warning sign of the dangers and the second message which contains the point coordinates of the vehicle in the form of latitude and longitude.

Keyword: GPS module, GSM GPRS Module, Arduino Uno ATmega328, Relay