ABSTRACT

The security system of the vehicle is currently minimal at this time, although the vehicle equipped with alarm feature does not necessarily guarantee the vehicle is safe, therefore a lot of cases of theft of vehicles that sometimes can not be avoided.

By putting the device on the vehicle, which is in the device there is a GPS module to get the coordinates of the location. Then the coordinate point is processed by a microcontroller which is then sent to the real time database using GPRS communication module. The device works when the vehicle is turned on and data will be sent at any duration that has been set. This device can serve as a tracking vehicle when the vehicle is in a state of flame.

The implementation of GPS Tracking System based on Android on every vehicle proved to be able to know the point of coordinates of a vehicle with average delay of data transmission of 29,6 s and data accuracy of $\pm$ 4 m every sending a data in realtime.

Key Words: *Vehicle Tracking*, *Real time database*, *Trip route*.