

**Sistem Pengaman Kendaraan Bermotor Menggunakan Ketukan Berbasis  
Arduino Nano** (*The Security System of Vehicle Using based beats from Arduino  
Nano*)

**Ardi Baharudin Ramadhan**  
*Automotive Engineering Study Program  
Engineering Department*

**ABSTRACT**

*In general security system, using the alarm clock as the safety of the vehicle motorcycle with the sound of produced by the alarm. The system is still less safe because the thief easily cut the cable alarm system. The process of making a prototype the safety system motor vehicles especially on the safety of two wheeled is more safe from other safety system. This study aims to know how to design and system of a vehicle using the based arduino nano Atmega328P. The prototype put down on the vehicle motorcycle as input and relay as output and the sensor aims to detect beats sound. Test result showed that a variety of the tool is highly influential against microcontroller and buzzer because if less than 3 at the time 3 second the microcontroller doesn't work and buzzer not rang. Test result of the sensor sound with the value of resistor 10 K $\Omega$  100 % the sensitive sensor not sensitive 50% with the value of resistor 4,17 K $\Omega$  the sensor work with the stable and 0% with the value of the resistor 0,00 K $\Omega$  than sensor extremely sensitive. Test result level the intensity of the sound of a beats on the sensor with the value of level intensity of the sound of 67 dB, 52 dB, 44 dB and 22 dB them sensor will not respond to signal does not work.*

**Keywords :** *Arduino nano, Sensor sound, Sound meter.*