

ABSTRACT

The number of accidents is based on AIS data IRSMS - Central Java Police, 21% of deaths or serious injuries are due to drunk driving / mengkonsumsi alcohol. Alcohol is a psychoactive substance that is addictive. Psychoactive substances is a class of substances that work selectively, especially in the brain that can lead to changes in actors, cognitive emotion, perception, and consciousness of a person. By the time a person consumes excessive alcohol can interfere with his own conscience.

Based on these needs, in this final project created a system that is installed in the car to prevent the driver driving in a state of consuming alcohol. The system consists of the main device in the form of arduino UNO. Then, with enhancements include sensors that will detect the breath of the driver is detected were consuming alcohol. The sensor will read the level of alcohol content in the driver, when sensors detect the alcohol is below 5%, led yellow will light up and the LCD will show the level of alcohol that has been consumed, whereas if the sensor detects alcohol above 5%, the red LED, buzzer on for 15 seconds accompanied LCD will display a warning that the machine will be turned off.

Based on testing by 2 samples alcohol content with the conditions a distance of 30 cm produced a warning that comes out of LCD and LED when alcohol is detected. Especially when alcohol is detected above 5%, the engine will shut down automatically so as to prevent motorists driving in a state of excessive alcohol consumption

Keywords : Alcohol, Arduino UNO, MQ-3, microcontroller, car