DESIGN AND BUILD A SOUND NOISE DETECTION SYSTEM WITH SOUND SENSOR AND SMARTPHONE CAMERA

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ABSTRACT

The development of electronics technology today is growing so fast, and behind all that there are human resources as a developer of electronic technology progress. Nosie is a sound or sound that is not desired. Noise based on it's influence on humanity can be differentiated into three types: distrubing noise, noise covering , and destructive noise. Limit noise on a road is around 85-90dB. The noise detection tool of vehicle on a road aims to assist poeple who lives nearby the road in managing the convienence of the road and the poeple who live nearby the road . Using the arduino UNO sound and microcontroller as the control center the purpose in this design is the houses tha lives nearby the road can run in peace the activity on the road can run quitely with this sound level metter for vehicle. The program that is used here is c++ language program with arduino aplication the tool that is used here is; sound sensor KY-307, Arduino UNO, Laptop, tongsis button,and Smartphone camera. With the way system working; sound sensor detects noise of a vehicle that is loud with number given up to 85dB the smartphone camera captures objet near around afterward. For the level of accuracy of the tool is tested by Sound Level Metter. The conclusion of this noise sensor detector is proven that the made of tool of noise sensor detector using smartphone camer based on arduino UNO can be apllied on small road or houses road.

Keywords: *Design, Sensor, Arduino, Noise*