

Abstract

Motorcycle and car vehicles are increasingly being used by many users. This can be proven from Motorcycle Sales in 2018 through 6,300,000 units [1]. However, as time goes by motorized vehicles are often modified in such a way that affects other users' discomfort and disturbs the peace of the surrounding residents [2]. Such as disturbing people's activities such as worship activities, teaching and learning processes and others [3]. In the paper [4], it is explained that the impact on noise can lead to reduced hearing function, and psychological influences. In another paper [5], the police implemented regulations aimed at curbing motorcycles and cars that had noise. Noise intended based on the Regulation of the Minister of Environment No. 07/2009 which states the noise threshold value by motorized vehicles is 85dB and a maximum of 90 dB. Therefore, in this study a system was calculated to calculate the angle and distance from the sound source that produced the sound source point. This study uses the Interaural Time Difference (ITD) method by capturing sound from a source with 2 microphones and then distinguishing the time to sound from the source to the two microphones with different positions displayed on the PC.

Keywords : Sound, *Interaural Time Difference*, Noise