AUDIO VOLUME CONTROLLER

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ABSTRACT

Video and audio entertainment devices are now very common in our daily life. With the existence of sound entertainment, human life becomes varied and graceful. Besides that, video and music entertainment may be able to fill the relaxing time after our busy working life. Here, an audio volume controller is designed to control the audio volume automatically during the video screening or music play back.

Broadcasting or movie audio outputs vary from time to time, for example, there is very high volume on action scene but soft on speaking moment. It could cause disturbance for the user. This project is to design a system between the audio output and the speaker. The audio level will be set by the user, which the audio output signal shall be either amplified or attenuated accordingly.

In the beginning stage of project design, several changes of block diagram are presented, and finally came out with the refined system block diagram. The refined block diagram has been used as a foundation of project design. The selection of suitable devices for each sub-system has gone through by the deep research on relevant technologies with respect to this project. After conducting several procedures in the project development process, the finished product of this project will be a combinational system between a main controller and its sub-components. With the strictness of testing procedure and troubleshooting, the expected outcomes of this project are finally presented.

This project report starts with the introduction of project background and objectives. Besides that, the initial block diagram will be showed to provide further understanding of the overall system. In chapter 2, the research on relevant technologies and description of main components used in this project has been explained. Furthermore, the methodology which fall under chapter 3 explains both hardware and software implementations of this project. The discussions have been carried out after the hardware testing. Finally, the final conclusion of this project will be given.