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SUPER HEARING AID

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ABSTRACT

The ear is an amazing organ that transports sound information to our brain causing us to react in various ways. However, many a times due to exposure to noise over a long period of time, aging or heredity, hearing loss may occur. Currently, the most popular and user friendly Technology used to reduce or solve this hearing loss is via a Hearing Aid.

The goal of this project is to build a circuit that captures the audio signal and by analyzing this signal to drive a colored high power LED light. Then it will amplify the audio received. This design can be used as a portable light chaser and could be productized as a peripheral for a hearing aid.

So the process, it will start by detecting human voice within the range of 300 to 3.4kHz. The LED will then light up for 5 seconds, and then turn off by receiving the voice. After that, the filter will filter any noise and unwanted signal.

As for the output, the voltage in microphone will be amplified to a certain voltage level that can be used by microphone. The human voice will be scaled in millivolt. The process is done.