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An Exploration of Electronic Synthesizers

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The electronic synthesizer is a commonly used piece of equipment to create music and the instrument itself has grown in the music industry. This paper will include and describe how the electronic synthesizer involves sound waves, sound production and electricity. The details and information revealed will be in relation of audio technology, this paper will allow students and musicians to explore and be informed of the basic science and physics behind the instrument. Using key information of audio technology, the basic and advanced parts of the synthesizer will be covered such as its functions involving filters, amplifiers and oscillators.

From sound waves and electric currents to the sound effects in the genre of dubstep, the main physics of sound is applied to the electronic synthesizer. Whether a musician or not, knowing the functions of this instrument is a good way to explore the physics of sound and electricity. Knowing the internal and external functions of the synthesizer can help one gain knowledge of basic physics of sound. Breaking down electric science of the synthesizer will leave one knowing not only what the instrument does it self, but why the instrument can make generated audio transform into music.