

JANUARY 2016

VIBRATION VAULT

Kwaku Opoku

General Information

Project Name: Vibration Vault

Reporting Period: From 29/01/2016 To N/A

Prepared By: Kwaku Opoku

Scope Summary: I am building a system that can enable deaf people to experience music

Evidence: Include drafts and images of work in progress, drawings, research, photographs, graphics, etc.

About

I came up with this idea, upon remembering an incident I had encountered in High School. There was a time my class and I paid a visit to a school for the deaf, in our community as part of Creativity Action and Service (CAS) project. I usually used to take music around, meaning I had my speakers and everything ready, almost overtime we went somewhere. However, this time I asked my teacher if it was needed, she also asked a teacher at the other school and her response was 'Why not?'

When we got there and I started playing music was when I really realized that what I was thinking wasn't the same thing that was happening – I thought they'd not be able to hear, let alone dance. But that was exactly what was happening. This made me rethink the way I viewed deaf people and also how I viewed music. Seeing the kids really enjoy the music, not because they could hear it, but rather feel it, from the vibrations from the speakers and other objects that transmitted these vibrations.

This is why I'm trying to build a system that can make it easier for deaf people to easily experience and feel the whatever music is being played at whatever time.

Research

How are we going to get the system to work? That's usually the first thing I ask myself. So the first thing I usually do is research. With this I had to understand how deaf people could experience music, also considering how deafness varied amongst different people. I went ahead and interviewed and interacted with a couple of deaf people and people who lived with deaf people. Just to get an understanding of how they experienced sound. Doing that really helped me and influenced my project a lot, because I got a lot of positive feedback.

I came across the term, Tactile sound – Tactile sound is the sensation of sound transmitted directly to the human body by contact, rather than by sound waves through the ears. This has served as the basis for my project because it is the way that completely deaf people usually interact and experience sound. However instead of stopping there, I went on to try and get a better understanding as to how I create a system to allow for a new experience of sound. This constant thought helped me come up with a light system which I'm still working on, along with some other musicians.

Tactile Sound

There is a notion that music can only be heard, well upon working with tactile sound, I have been working on a couple of tactile sound transducers, because I noticed that was one of the main ways people not just deaf people, experience sound. Deaf people sense vibration in the part of the brain that other people use for hearing — which helps explain how deaf musicians can sense music, and how deaf people can enjoy concerts and other musical events.

This helped me to start building the system which wasn't really what I imagined it to be from the start, because it started from being something very complex in my mind to becoming very simple. Something that could just make it very easy to transmit these vibrations that the music produces.

Lighting Language

I explored trying to use light as my medium to create this experience as well. Trying to create a musical language with whatever music was playing. My tried making my own app to work make this happen; an app that run on making colors have a specific meaning, directly related to the music playing.

I was only successful in making an app work only with the BPM of the songs that played, which isn't exactly creating a language, because a lot of songs may have the same BPM.

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ITERATIONS

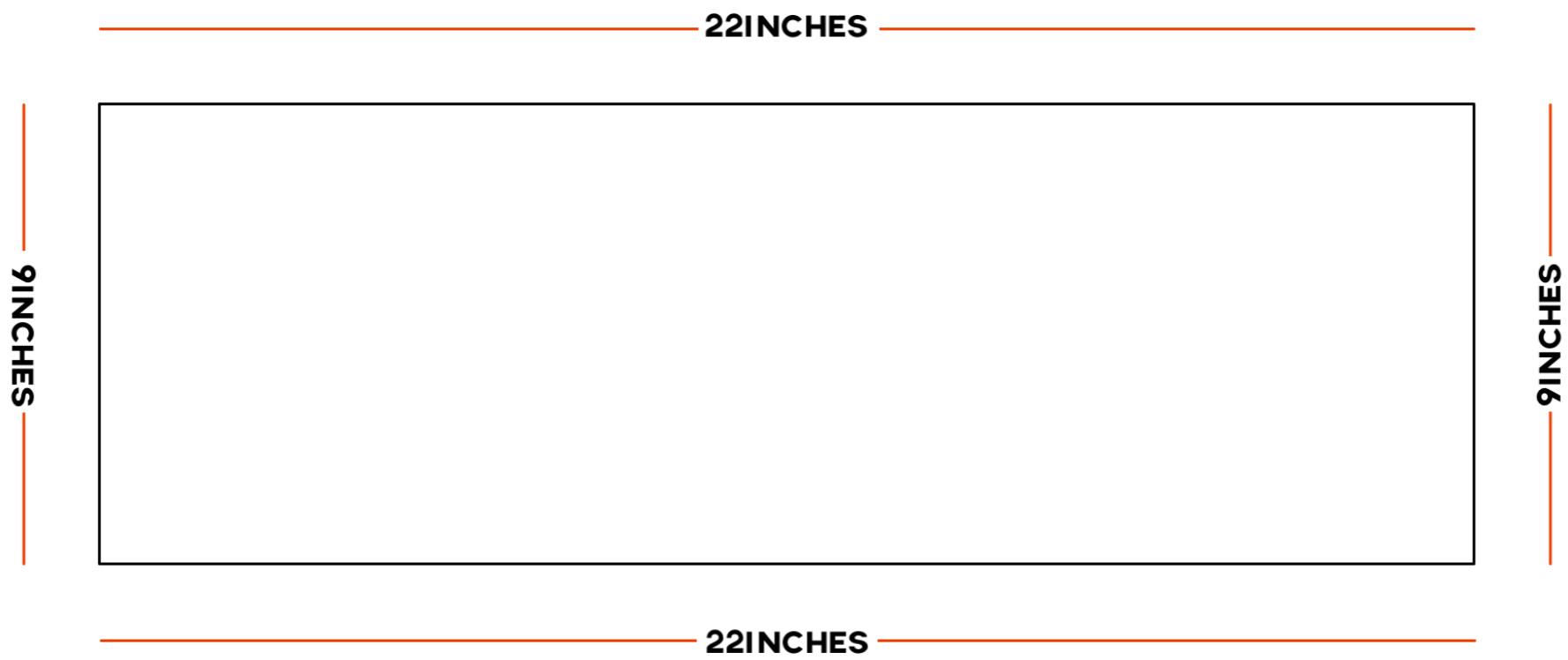




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DIMENSIONS







How It Works

My idea for the Vibration Vault, was to use it as sort of a floorboard for different places; Event halls, houses, and different places that use music as a means of transmitting a message.

Basically which ever speakers that are used will go within these floorboards to make the vibrations more recognizable, and this will effectively pronounce the tactile sound.