

*Date: 2/13/17*

*Group number: 1712*

*Project title: Sound Effect Devices for Musicians*

*Client &/Advisor: Professors Geiger and Chen*

*Team Members/Role: Jake Asmus/Team Leader, Joseph Brown/Team Communicator, Daniel Peterjohn/Team Webmaster, and Jiangning Xiong/Team Key Concept Holder*

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○ **Weekly Summary**

- This week we met together to discuss the best method for adjusting frequency entering the circuit, and how to accomplish the pedal controls through the mat. We are currently studying a way to use a frequency mixer circuit to adjust the incoming frequency to the new frequency that is double or half the original frequency. We are trying to prove this methodology in PSPICE, but have encountered some difficulties in the functionality. The pedal mat idea is coming along nicely, with a solid lead on the functionality being controlled with microcontrollers. With the use of microcontrollers, we might be able to achieve a wireless connection to the pedal from the mat.

○ **Pending issues**

- Daniel Peterjohn is currently reviewing different possibilities for microcontrollers to communicate between the pedal and the pedal mat.
- Jake Asmus, Joseph Brown, and Jiangning Xiong are currently reviewing different frequency modulation circuit ideas, and trying to prove the functionality in PSPICE.

○ **Individual contributions**

<b><u>NAME</u></b>	<b><u>Individual Contributions</u></b>	<b><u>Hours this week</u></b>	<b><u>Hours cumulative</u></b>
Jake Asmus	Frequency modulation test circuit and research	3	7
Joseph Brown	Frequency modulation test circuit research	3	7
Daniel Peterjohn	Research on possible microcontrollers	2	6
Jiangning Xiong	Frequency modulation test circuit	2	6

○ **Plan for coming week**

- Daniel Peterjohn is going to find a microcontroller and start working over the functionality of the mat.
- Jake Asmus, Joseph Brown, and Jiangning Xiong are going to continue their research for a frequency modulation circuit, possibly consulting with Professor Geiger for tips on the type of circuit to use.

### *EE 491 WEEKLY REPORT 3*

- **Summary of weekly advisor meeting**
  - We did not have a meeting with Professor Geiger or Chen, since they were out of town. We will try to make contact with them and discuss our project progress with them on Thursday.