sdmay18-39: Sound Effect Devices for Musicians

Week 6 Report
October 17 - October 30

Team Members

Benjamin Reichert ***— Experimentation Team Leader***
Daniel Kroese ***— Software Integration Leader***
Garrett Mayer ***— Technical Communications Leader***
Thomas Kimler ***— Technical Project Manager***
Virginia Boy ***— Communications Leader***

Summary of Progress this Report

- Developed initial test bench to automate characteristic testing
- Began testing in effort to draw conclusions from experiments
- Constructed attenuator circuit for part of the test bench
- Revised and edited Project Plan
-Upgraded Matlab functions

Pending Issues

-Test bench needs improvement
-Non-trivial hum introduced from pre-amp stage on recorder
-Grounding issue between amplifier "neutral" and attenuator ground - causes shrill shrieks out of amp at high gains

Plans for Upcoming Reporting Period

-Develop improved test bench
-Get coherent FFT of signal
-Begin analysis of collected data in time and frequency domain

Individual Contributions

Team Member	Contribution	Weekly Hours	Total Hours
Benjamin Reichert	Initial attenuator circuits implemented, signal chain established, Data recorder set up, software interface installed and run, Preliminary recordings performed using new recorder and test bench	10	50
Daniel Kroese	took more tests of amp output reconciling issues from before, reached out to more professors regarding progress, began building circuit for a our testbench	8	46
Garrett Mayer	Matlab functions upgrades: plotting fft,	7	50

	waves, writing files, reading files; Data analysis of inital test bench data; updated website		
Thomas Kimler	Assisted in debugging sound recording issues, Troubleshooted noise issues in test setup hardware	8	52
Virginia Boy	Revised and edited project plan, researched various power supply methods for amplifiers	5	35