

**sdmay18-39: Sound Effect Devices for Musicians**

Week 2 Report

September 12 - September 19

**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**

- Evaluated Primary Experiment Data
- Performed Secondary Experiment
- Researched Improved methods for collecting and analyzing data
- Initialized Gitlab Documentation and Website setup

**Pending Issues**

- Problems distinguishing 'scientific' information from 'marketing' information in research
- Need to generalize Matlab code for future use
- Testing is incomplete, we need to test solid state spectral response to validate data

**Plans for Upcoming Reporting Period**

- Continue to develop attenuator circuit design to implement in future data collection
- Compare solid state and tube amplifier harmonics
- Complete website setup

**Individual Contributions**

Team Member	Contribution	Weekly Hours	Total Hours
Benjamin Reichert	Performed Harmonic Optimization Test: Matlab signal construction Blind test conducted on group members Outlined direction for next weeks follow-up experiment (Solid State comparison)	6	18
Daniel Kroese	Reached out to expert musicians on their opinions on music	3	15
Garrett Mayer	Created Matlab Wave Construction Code, Initialized/Transferred Gitlab Documentation, Committed Git Documents: Webpage, readme, Updated Website	8	20

Thomas Kimler	Researched methods for capturing information from audio power amplifiers (APAs) without the use of microphones, Developed "pencil/paper" calculations to serve as constraints for direct capture solution, Began schematic design for direct capture solution	6	18
Virginia Boy	Performed Harmonic Optimization Test Matlab signal construction Blind test conducted on group members Optimized signals to export	6	18