Weekly report

EE 491 DEC1503

April 20, 2015

Modular Audio Mixer

Advisor: Josh Bertram

Client: Jay Becker

Clayton Hawken: Team Leader

Debbie Baeder: Team Communication Leader

Chad Stobbie: Team Concept Holder

Brian West: Team Webmaster

## Weekly Summary

All components but the Raspberry Pi jumpers have been delivered to us. The PCB and components will be soldered together this coming weekend, and the translucent acrylic will be cut into the enclosure sides by next week. Preliminary programming is running smoothly; no bugs have been found since nothing has been wired.

## Team/Client Meeting Notes

* **Duration:**  70 min **Members Present:** Clay, Chad, Brian, Debbie.
* **Purpose and Goals:** The team met to discuss what the presentation should convey, and which topics to cover. The team picked up parts from the electronics shop. Jay was briefly updated that parts were delivered, and the enclosure material had been ordered.

##  Team/Advisor Meeting Notes

* **Duration:**  45 minutes **Members Present:** Clay, Chad, Brian, and Debbie.
* **Purpose and Goals:**Josh unfortunately missed this meeting, but the team worked on enclosure details, programming schemes, and tested soldering skills.
* **Achievements:**
	+ *PCB:* The board has arrived in great quality, with nearly all of the pads in perfect condition. We plan to start soldering this weekend. We need to get mounting hardware, and mounting hardware, for the heat sink. We also need wires to reach the external components that are attached to the enclosure.
	+ *Enclosure:*The translucent acrylic boards came in as well, but after more deliberation on surface area, we think more sheets should be ordered. The sheets will be laser cut on campus, per side of the enclosure. It should be complete by the middle of next week.
	+ *Programming:*Rotary Encoder and LCD programming is done, and runs through. The Digital Potentiometer code is in progress.

## Pending Issues

* *Await more acrylic, and fabricate on campus in the meantime.*
* *Practice soldering before starting on the PCB fabrication.*

## Plans for Next Week

Brian: -Continue programming. Digital potentiometer interfacing through I2C needs to be ironed out and working. Need to incorporate more than just one hardware piece and evaluate performance again. Have our program run on boot up.

Debbie: Cut the priority sides of the enclosure while waiting for the rest of the acrylic, then build the components onto the enclosure.

Chad: Solder components to the PCB

Clay: Implement Digital Potentiometer code on working prototype.

## Individual Contributions

Clay: Soldering Components to PCB and work with Raspberry Pi Programming.

Debbie: Consulted Boyd lab for labor and fabrication advice, but was redirected to use laser cutting, as it is more precise and quicker.

Brian: Rotary encoder functionality is fully implemented. LCD code is up and running. Text can be displayed to the screen.

Chad: Received the PCB from fabrication. Assisted the team in constructing the prototype

# Weekly hours for the project: 34

|  |  |
| --- | --- |
| Name | Hours |
| Clay Hawken | 10 |
| Debbie Baeder | 6 |
| Brian West | 15 |
| Chad Stobbie | 3 |

#

# total hours for the project: 226

|  |  |
| --- | --- |
| Name | Hours |
| Clay Hawken | 54 |
| Debbie Baeder | 64 |
| Brian West | 54.5 |
| Chad Stobbie | 53.5 |