Project Identity
Modified Communication System for Client with Disabilities
Week 6: 10/1/06 – 10/7/06
Philip Licitra

Work Completed

This week we finally got the joystick to work properly with a computer. As long as the computer detects the joystick through the USB port, and the settings are configured as a game controller, it will function properly. Each button on the top of the joystick functions as a separate control and we figured out the correct configuration to wire in the mono jack for the addition of the Specs switch. We will make each of the buttons work for the same function and as well as the Specs switch. To ensure all three buttons function the same way, we will have the common red wire connect to all three buttons as well as either the yellow or green wire. Figure 1 shows a test run of the integration of the Specs switch into the joystick circuit.

Figure 1: The Specs Switch Testing

This week I also made a to-scale model of the screen enclosure and decided to adjust some of the dimensions before making a final order of the ABS plastic. The exact dimensions are indicated in the Visio drawing shown in figure 2. The ABS will be 0.25 inches thick and will be bonded
with IPS Weld-On 2354 glue specifically made for the strong adhesion between ABS pieces. Following the construction of the scale model of the screen casing, I was able to determine that the biggest piece of ABS needed is a 12” x 24” sheet. We will also be including ventilation slits in the case to allow for the microprocessors to breathe. Figures 3 and 4 show the cardboard scale models of the screen casing.

Figure 2: New Screen Casing Dimensions in Inches

Figure 3: Back View of Scale Model of Screen Casing
Future Work

We will continue to complete the electrical connections for the LCD screen, battery pack, and charger, so that we can begin to test the system and construct an encasement for the screen. We can also begin to make the final connections of the joystick now that we are sure that it works properly and no device drivers are necessary or additional adjustments are needed. We can order the ABS glue and the glue applicator from TAP Plastics as soon as we know if the ABS will be donated to us from Stephanie’s father.

I will travel home on Monday to pick up the proper cords that are needed to finalize the screen connections so that we can begin test them. We are still waiting to hear from the 80/20 company on the status of our price requests so that we can order the mounting parts.

Project Review

We are making all the proper connections and testing all of the components. All parts are working properly and the final connections will occur very soon. We only need to order the mounting systems from 80/20 and the ABS glue. The remaining money in our budget is $219.95, leaving plenty of money for the last orders in our project. Our timeline is on schedule and everything should be completed by mid November.

Hours worked: 9.5