**Project Identity**
Modified Communication System for Client with Disabilities  
Week 8: 10/15/06 – 10/21/06  
Philip Licitra

**Work Completed**

This week there was a lot of testing and circuitry work that was completed. There was also drilling, modifications, and installing parts into the joystick enclosure. Once the final decisions are made on the controls for the various buttons on the joystick, the wires can be snapped into place in the correct ports in the bottom of the joystick.

Figures 1 and 2 show, pictorially, the wiring schematic for the rocker switch. The hot side of the rocker switch is the high position of the switch. In figures 1 and 2, the red LED is illuminated when the rocker switch is high and the green LED is illuminated when the rocker switch is high. The central position is OFF for both circuits. As the switch was being tested, we played around with the notion of including LED indicator lights to show which position the rocker switch is in for the user.

![Figure 1: Rocker Switch Red LED Indicator](image1)

![Figure 2: Rocker Switch Green LED Indicator](image2)
I drilled the various holes in the joystick enclosure to allow for the USB cord to enter the closed box, for the mounting of the panel-mount 1/8 inch mono jack for the Specs Switch, and the holes for the mounting of the 80/20 Linear Bearing bracket. The mono jack is recessed into the enclosure to allow for a more aesthetically pleasing appearance. I also drilled out the Linear Bearing to allow for the insertion of the Ratcheting L-Handle which will secure the joystick onto the 1 inch 80/20. Figure 3 shows the Specs Switch inserted into the mono jack and the USB cord exiting the enclosure. Figure 4 shows the Ratcheting L-Handle in the Linear Bearing bracket. Figure 5 shows the Linear Bearing mounted onto the right side of the enclosure, the 1/8 inch panel-mount mono jack in the background, and the vinyl grommet around the USB cord in the foreground as it exits the enclosure.

**Future Work**

This week we will begin to cut and assemble the black ABS for the screen enclosure. Once the screen enclosure is completed, we can begin to install the parts in it. Other work that may be researched is the installation of the LED indicator lights and a battery monitor light system, but depending on our budget and available time, we still have yet to make a decision on their inclusion in this project.
Project Review

Currently, we have $3.26 remaining in our budget for the two shipping and handling costs that we have not received. We were given the go-ahead to go over budget for the screen mounting parts, which were also ordered this week. We have used approximately, $746.74 on all of the part orders. Our timeline is on track to finish the construction of the project by the end of October/beginning of November as long as out remaining parts are shipped in a timely fashion.

Hours worked: 10