Easel 5000
Week 4
February 17 - February 24, 2006
Justin Yu
Work Completed

Machining

Machining work continued this week for a few of the remaining pieces for easel construction. With many of the parts not having yet arrived, machine work was done in order to be fully prepared for their arrival. Extrusions pieces were drilled and the ends of necessary pieces were tapped to enable the use of screws. In addition, machining for the LED system was started. With the ideas come up with, PVC pieces were cut and will be assembled for the LED subunit encasement.

Measuring PVC at machine shop
Machine used to cut PVC

Cut PVC pieces
Canvas Holder Design

Last week, it was revealed to us that the artist using this easel would be painting extensively on sheet metal pieces with dimensions in the range of 9”x36”. Upon discussion and research into this, it was decided that the current design of the canvas holder and the easel in general would be able to support this size canvas. No further changes to design will be necessary.

Dampening

The shipment from Reell Corporation came in. Now that there are friction hinges, dampening for the easel system is incorporated into the design. Each dynamic joint will have friction hinges attached to them so that when adjusting the position of the canvas or any of the arms, there will be a higher required force to move the joint. This prevents many accidents and hazards the artist or aids may experience in using the easel.

Future Work

Now that close to all the parts for the easel have arrived, the main focus for future work will be assembly and construction. The remainder of the easel itself will be assembled as well as the beginnings of the LED subunit. Incorporating the friction hinges into the joints will require a lot of trial and error to see what works best. Initial design testing will be handled immediately following construction.

Project Review

The project is moving along on schedule. Now, at the middle of the construction phase, each subunit for the easel is being put together and incorporated. Although there were some bumpy times where parts arrived later than expected, construction and design critique were continued. Overall, testing of the prototype should begin soon to find out
what else exactly needs to be done to the easel for more efficient design. Finding out how to cut down on the weight may be challenging.

Hours Worked

11 hours.