Work Completed

The work I completed this week once again revolved around the output device I am constructing. This week I concluded testing on the output device for many hours. This testing verified that the battery has a good life and that the device will work as planned without failure for extended periods of time. We had previously only tested the device with a video signal produced by Kyle’s computer so this week we tested it with the video output of a television and of a Super Nintendo for the sake of completeness. It has also been verified that the Single Throw Single Pole (SPST) rocker switch that I added functions as planned and is capable of operating the wireless receiver as well as the LCD at the same time. The third component we tested was the battery charger and its ability to work with the more complicated circuit in the enclosure and that too worked like a charm.

Having the device working properly allowed me to shift my focus to designing the final output case, complete with mounting schemes. This work was time consuming but important. The initial dimensions I had come up with were 7 x 4½ x 4”, the new enclosure will be 1” larger in all directions to keep things simple and make room for the mounting hardware and brackets. This will bring the cases dimensions to 8 x 5½ x 5”.

After designing the case’s layout and dimensions I moved my focus onto finding a suitable material for building the case. I decided on Acrylonitrile-Butadiene-Styrene (ABS). ABS material is used for a number of different applications including tub/shower surrounds, pickup truck caps, boat accessories, automotive trim parts and computer housings. The ABS I settled on is of general purpose quality which is cheaper than the engineering grade and comes in 8 x 4’ sheets. As far as the color I chose black, the choices were black or white. The material thickness I selected was 0.250”.

The other work I did this week was to order a battery for Tristan’s input device, since he needed a 12V battery we decided to order the same one that I am using for the input device. Included in this order was a male tamiya clip, which will allow the user to charge the battery for the input and output device with the same charger.
The final thing I did this week was to maintain our budget. I found that out of our initial $750.00 we have only spent $276.48 leaving us with a balance of $473.52. The only other thing I foresee us spending our money on is the ABS material, which is only $88.82 for the 8 x 4’ sheet. This shows we are under budget and ahead of schedule so far on this project.
Future Work

As far as future work my main concern this week is going to be to order the ABS material because until that gets here I will not be able to build the final output case and I would like to have that done within 10 days. More importantly than that, the one mounting issue remaining for me to overcome is how I am going to mount the LCD screen inside the case that I built. The problem with the screen is that it's very thin and there is less than 1/4” on any side of the working screen, another issue is that the screen has different measurements on different sides which made case design even more awkward.

The other direction my work will take me this week is to program more Flash. Any programming I do helps me to develop the little skills that make me a good programmer. Just like anything else practice makes perfect and with that in mind I realize any time I put into Flash will inevitably pay off in the long run.

Project Review

At this point in the project I feel we are right on schedule if not ahead of schedule. The output device is virtually complete and is only waiting on the arrival of the material it will be built out of. The input device has been worked on vigorously by Tristan this week and he final has accurate enough measurements completed to take to the machine shop. He will also unfortunately be waiting on the arrival of the ABS material. Kyle also made leaps and bounds in the Flash programming this week, which is a relief to us all.

Projected Timeline

Tues (10-09-07): Team meeting with just team members, weekly reports, update website
Wed: Work on final output device case, program Flash
Thurs: Work on final output device case, program Flash
Fri: Order ABS, program Flash, work final budget

Hours Worked

12 hours