This week I mainly worked on the input device. I ordered the ABS enclosure for it and also the internal ABS mounting that will serve to hold all the internal parts together. The mounting is designed so that, in case of emergency, the battery pack can be removed easily by unscrewing the top of the enclosure.
Figure 1. Internal Mounting of Input Device
This is the enclosure selected from Hammond Manufacturing. Several careful measurements were made to make sure that all the materials would be able to fit inside the enclosure. This enclosure (1555SGY, 6.3 in. L, 6.3 in. W, 3.5 in. H) will be ordered in addition to ABS material required for mounting. ABS material will be used for mounting since same materials more easily bond to each other.

![ABS enclosure for Input device](image)

Figure 2. ABS enclosure for Input device

The power circuit for the device will be similar to that of the output device in that it uses a battery source. A NiMH Battery Pack (12V, 220mAh) will power the wireless transmitter. The battery source will be rechargeable, and since it is the same type of battery as the output device the user can interchange between charging either of them.
Future Work

These measurements may change slightly depending on the box that arrives so I will have to modify the schematics based on this. I will need to buy an ON/OFF switch for the transmitter and rubber feet for the device once it comes in. I will then go to the machine shop and begin working on the device which should take two or three days to fabricate. After that I will go do work on FLASH and create the number of environments required for the user. Several stumbling blocks have been found with FLASH since it requires layering meaning each shape must be its object, which means creating many more objects that what one would anticipate.
Project Review

It looks like the input device has been finalized. The designs will soon be complete enough for actual machine-working on the device. The output device appears to also be nearing its final stages in development. On the other hand, the FLASH programming aspect of the project needs more help. As one goes deeper into the programming the more difficult certain aspects become more apparent, such as, the function of layering.

Hours Worked

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