Project Identity
UConn Health Center Wire Tester
Week 2: 1/31/07 – 2/6/07
Scott Michonski

Work Completed

This week we placed all of our significant parts order. We finally got the go ahead from our contractors that we could order the products we need to build our device. I placed orders on all three of the linear slides that we will be using and the materials we will use to mount our attachments together.

The parts ordered this week were three linear slides from Anaheim Automation, two of the slides will be mounted together using T-Nuts that come from the company. The two we mount will be our xy axis, and the single linear slide will be attached to our base vertically to achieve our z axis of movement. The parts numbers for the parts are as follows:

3 Linear slides: LS100-06-A-S-5K-B

This specific model is a six inch slide, with 0.0625” lead screws, it has end of travel options and utilizes a 23MDSI-106S model motor for movement. The slides we will be using are shown in the following figure.

Figure 1. Linear Slides from Anaheim Automation
http://www.anaheimautomation.com/postables.htm
Figure 1. on the previous page shows the setup of slides that we will be using in our design. The slides that are connected on the right show how we will be mounting the two slides together. The single axis slide which is the image on the left will be mounted vertically.

We also placed order for other equipment from this company. The model numbers for these parts are:

485SD9TB
This is the RS485 converter which we will need to allow motor to computer connection.

LS100-TNUT-01
These are the T-Nuts we will need to attach our slides together.

We have just received the RS485 converter in the mail from Anaheim and I have researched how it will connect to the motor. A circuit diagram of our converter is shown in Figure 2.

![Figure 2. RS485 Converter](http://www.anaheimautomation.com/manuals/L010113-%20485SD9TB%20Spec%20Sheet.pdf)
The figure on the following page relates to how the motor will connect to the RS485 converter. The J1 connections are where the motor will connect to the RS485 converter. We will need transformers to be able to supply the converter with a 5volt and 12 volt power sources.

Future Work

We have just received our sample motor and our sample RS485 converter from Anaheim Automation. The motor that we just got in the mail is the motor that will be attached to our linear slides. I can now start building code and creating the program that our linear slides will run off of. This will also allow me to test the motor and make sure that it will provide us with accurate movement. I can also start testing the connection between the RS485 and the motor to make sure that everything will connect properly to the computer.

An application engineer from Anaheim has sent me the software that I will need to use to program the motors. I intend to learn how to use the software and start implementing it for next week.

Project Review

Now that our parts orders have been confirmed our project will start to become more developed. The turn around time on the major things we ordered is four to six weeks. Our sample motor has given us a way to be productive in light of the fact that our parts have not yet arrived and we will be able to make significant progress on our device even though everything we need has not yet arrived.