

Cecilia Bashaw
Personal CAD Project Summary
Engineering Design 100
Professor: Bevin Etienne

Magicharge

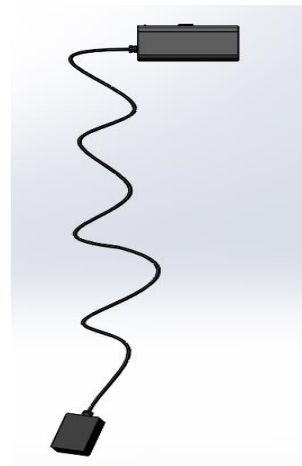
For my personal CAD project, I decided to create the model for my Engineering Design 100 group's AT&T project. One person from each group was responsible for the CAD model for the group's creation and I was the designated person from our group, the Allegiant. Dr. Etienne is allowing us to double count it for the project and the personal CAD project.

We designed a wireless charging system for our AT&T challenge. This device can charge your phone from a distance through magnetic resonance. The device I created on SolidWorks is a rough design of the system's hub that would be plugged into a standard outlet. The device is called Magicharge and has copper inductive coils inside (but this was not included in the actual SolidWorks design). We based our design off of a normal TV set box that would be roughly the size of an alarm clock. The box is 8 inches long, 6 inches wide and 2 inches tall. It has a plug and wire attached to the back end. On the very top it has a button to connect your phone to the device and a blinking LED light that lets you know when your phone is charged (color will be green) and when it is not fully charged yet (color would be red in that case).

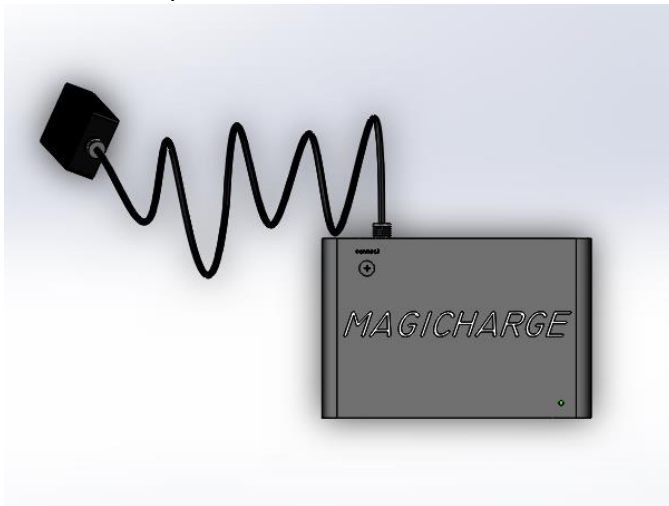
The SolidWorks design contains 4 assemblies, a dome feature, multiple emboss bases and emboss cuts and was created with real life measurements in mind. The measurement setting is in inches. The most difficult part of this project for me was creating the plug that would fit into a standard outlet. It took me multiple sketches and the final design was the last of five attempts. However, I believe I succeeded in making it realistic.

Attached below are pictures that this design was based off of and multi-view screen shots of the final product. ENJOY!

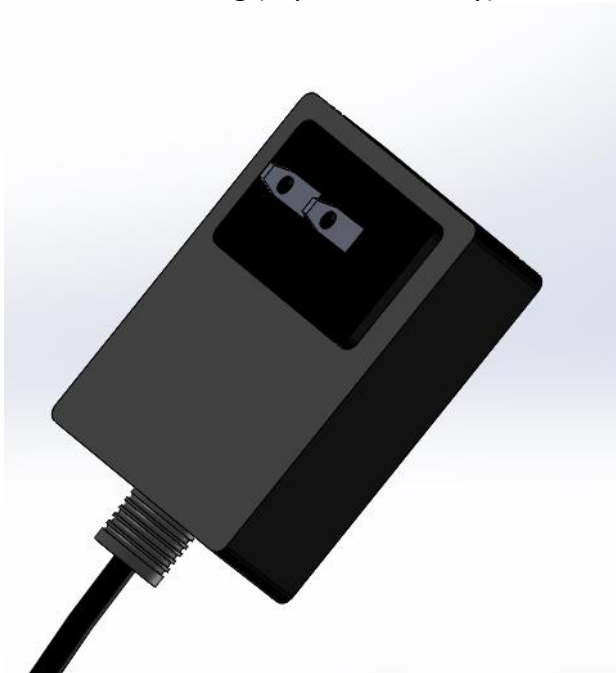
Picture 1- Side View of Final Product



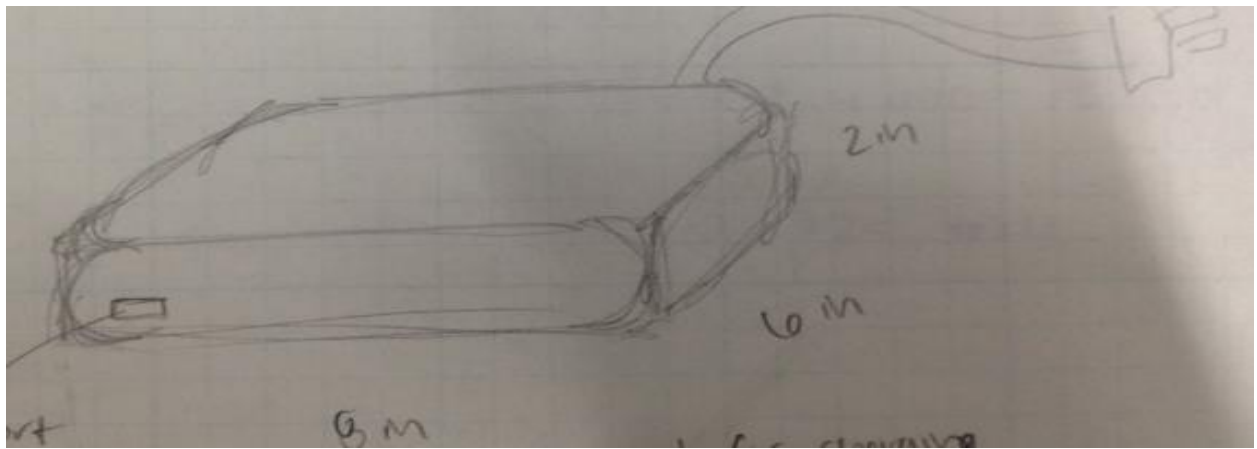
Picture 2- Top View of Final Product



Picture 3- The Plug (My Pride and Joy)



Picture 4- Rough Design before Actual SolidWorks Creation



Picture 5- Inspiration for Plug

