

**Meeting Purpose :** The purpose of this meeting is to revise and improve our system level design for not only the mechanical but also the electrical aspect of the project. Review system designs of the Friction Wheel Design, Generator Interface, Case/Stand Design, Power Electronics, and Display.

**Materials Reviewed:**

**Attendees:** Lucas Sienk Team lead EE, Derek Horton ME, Matt Sones ME, Matt Sennett ME, Jeremy Tosh EE, Barrett Zeinfeld IE, Dr. Mathew, Dr. Lyshevski, Dr. Phillips

**Recorded by :** Barrett Zeinfeld IE

\_\_\_\_\_ *(signature of person recording meeting notes)*

**Meeting Date:** 10-31-08

**Discussion** *(describe any relevant discussions not captured in actions / issues / decisions tables):*

Issues					
Item #	Description	Responsible	Open Date	Close Date	Comments
I001	<b>Friction Wheel Design:</b>				
I002	Standard ball bearings don't like side loads, look into the side loads applied by the friction wheel.	Matt			
I003	Do you need that many degrees of freedom?	Matt			
I004	Self aligning mechanism?	Matt			
I005	How much customer abuse are you expecting?	Derek			
I006	Define criteria for rigidity.	Derek			
I007	What kind of impact can this thing take?	Derek			
I008	What is preventing you from placing the case on the floor?	Derek			
I009	How is everything inside going to be mounted?	Derek			
I010	Where are you at with the BOM?				
I011	<b>Case/Stand Design</b>				
I012	Do you expect to get extra parts? And for which parts?	Matt			
I013	How much freedom does the stand need? According to average heights in the US	Matt			
I014	No sharp corners	Matt			
I015	What is the base going to be made out of?	Matt			
I016	Water proof?	Matt			
I017	Possibly add a Plexiglas polarized cover for the front of the LCD screen	Matt			
I018	Add a reset button	Matt			

<b>Issues</b>					
<b>Item #</b>	<b>Description</b>	<b>Responsible</b>	<b>Open Date</b>	<b>Close Date</b>	<b>Comments</b>
I019	Lock down all sizes this week.	Matt			
I020	Not a requirement to be able to adjust with one hand	Matt			
I021	Maybe order an extra polycarbonate case	Matt			
I022	Have fans blowing out to prevent water damage	Matt			
I023	Ipod holder needs to be easy replaceable	Matt			
I024	How will you get your cables from the top box to the bottom box?	Matt			
I025	<b>Power Electronics</b>				
I026	What is the advantage of the controlled rectifier?	Lucas			
I027	Can you power your ipod if you don't pedal?	Lucas			
I028	What happens when the system is idol? Does the battery lose power?	Lucas			
I029	How long until the system goes to sleep?	Lucas			
I030	Where is all the excess power going?	Lucas			
I031	When the battery is completely dead with it still be able to generate power?	Lucas			
I032	Is it possible to make it completely analogue?	Lucas			
I033	<b>Display</b>				
I034	Need to keep your connection with Derek and stay in communication and on the same page	Jeremy			
	Start programming now	Jeremy			

<b>Decisions</b>				
<b>Item #</b>	<b>Description</b>	<b>Contributing Individuals</b>	<b>Decision Date</b>	<b>Comments</b>
D001	Display driver chip instead of 2 microcontrollers	Jeremy		
D002	Where is the excess energy going? What is getting 'hott'?	Jeremy		
D003	What happens if you disconnect the generator?	Jeremy		
D004				
D005				