

Project Goals

- Device functionality
- Meet client expectations
- Design efficiency
- Product safety
- User friendly
- Durability

Special Thanks

Team Life Design would like to thank Professor Courtland, Dr. Cedric Walker, and Dr. David Rice for their generous contributions and guidance throughout this project. We would also like to thank our generous client Scott for meeting with us and going above and beyond to ensure that we had the tools to design and produce a device that met his expectations.

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Life Design



Integrated Entertainment
and Communication
System

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Product Introduction

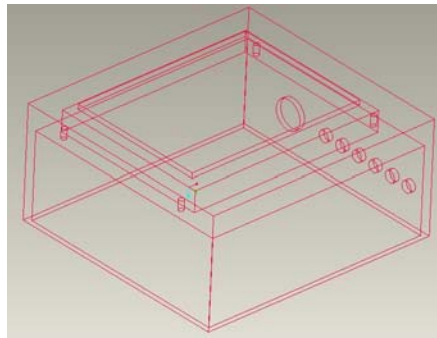
Life Design has developed a means for our client, Scott, to



easily switch between the multimedia devices that he uses on a daily basis. The design utilizes a touchscreen LCD and an embedded processor to automatically align the desired input multimedia devices with the selected output. The design uses a touchscreen LCD to facilitate our clients ability to use the limited mobility in his right arm. The product that Life Design has created allows our client the freedom and ability to choose and to integrate himself better into his surrounding environment.

Design Considerations

- The interface is accomplished through the use of a 5.6" diagonal touchscreen LCD that is programmable and used as the interface to the microcontroller that ultimately controls the graphical user interface (GUI).



- The use of a programmable integrated microcontroller (PIC) allows the device to be flexible and allows for easy incorporation of new functionalities
- Present the client with a product that requires minimal physical interaction by way of comprehensive software design and digitally controlled outputs.

Conclusion

Thus far in our design process we have constructed a prototype and have created the first generation final product. The functionality of the device circuitry, graphical user interface, and casing have been tested. The second generation of the device is in the manufacturing stage currently and will include client approval and testing along with casing refinements and functionality enhancements with both the input and output selections as well as interface options.

