

Power Rangers Jan 28, 2015

Meeting Leader: S. Ritter

Minutes: E. Syers

Attendance: M. Schafer, A. Lanre-Ladenegan, M. Hannon, S. Ritter, E. Syers

Meeting started promptly at 9 AM in the Control Systems Lab (A63 Fitzpatrick) and was attended by all members.

Agenda:

Hardware Update: Focus has been shifted to working on a more manageable portion of the converter circuit.

Converter Board: M. Hannon working with M. Lemmon to finalize a reduced board to be sent out some time in the next week.

PWM Circuit: E. Syers working to understand the operation of the PWM chip and what components are necessary to achieve desired operation.

Software Update: A. Lanre-Ladenegan and S. Ritter talked to M. Lemmon re the control method to be used (Table lookup versus a controls-based tracking system) and decided to go forward with the table lookup based on time constraints.

Powerpoint Algorithm: Code is working on a hard code input. Effort will shift to getting a more practical input to work.

Microcontroller Design: A. Lanre-Ladenegan and S. Ritter will meet with M. Lemmon over the next week to get started designing a microcontroller layout.

Comments: M. Schafer suggested trying to use microcontroller to do PWM for more control capability and being more direct. Team will bring up with M. Lemmon at earliest convenience.

M. Schafer recommended looking into an optocoupler for extra protection.

M. Schafer recommended unity gain buffer amplifiers on analog pins.

Action Items: M. Hannon will finalize a board design to start testing the converter.

E. Syers will work to get PWM chip operating as desired so that a better understanding of necessary parts is understood when the converter is being built.

A. Lanre-Ladenegan and S. Ritter will continue improving the table lookup algorithm and will begin designing a board layout for the microcontroller portion.