

Universal Wireless Glove Controller, Winter 2013

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Problem Definition

- The development of a gloved system capable of being adapted to replace standard remote controls.
- Musical instruction, Universal Electronic Control, superior interactive gaming,
- Prototype helicopter control set by Spring 2013, Wii system control set by Spring 2014, Universal control Set by Spring 2015
- Gloves, PICmicro 18f1320, US Eagle Wireless Helicopter, Nintendo Wii, Phillips Universal Remote, HP Laptop Media Set/Controller, Various household electronics with wireless systems

Research/Analysis

- The interfacing of each remote system will be increasingly complicated to program & control, requiring careful selection of the proper microchip to utilize for the intermediary link.
- Wireless signal analysis, gyro & accelerometer identification and implementation.
- Multiple protocol systems will demand an understanding of how to prioritize the signal interface of the chip and program written.

Proposed Solution

- By first developing the control set for the simpler system of a wireless remote control helicopter the understanding of how to program an intermediate chip is developed, followed by the more complicated Wii system, the “universal” control set will be more broadly & modernly implementable. This process will allow for older as well as newer electronics and computer systems to be interfaced and controlled with a single remote set of gloves.

Potential Applications

- Multi-computer interfacing, space recognized practice patterns – i.e., musical instruments, martial arts and sports practice, et cetra – electronic controls simplification, and portable streamlining for electronic control.



Instructions:

- 1) Use the previous page as a template to create a 11"x17" page Project Proposal and name the file the same as the project title (I.e great project proposal.pdf).
- 2) upload data sheet in pdf format (remove this instruction sheet) to moodle by the due date
- 3) Prepare to present in class and in club by due date.