

Positioning device for ophthalmic scanning laser systems

Team: “Ocular Imaging” Team

Client: Carol Rasmussen

Advisor: Professor Tom Yen

Team Members: Daniel Frost (Team Leader, BWIG)

William Stanford (Communicator, BSAC)

February 20 to February 26

Last Week’s Goals

- Order motors and joystick.
- Start planning experiment.
- Contact client with updates.

Summary of Accomplishments

- Ordered three motors that will work with the torque values we tested for.
- Ordered three motor controllers that will allow us to control the speed of the movement of the table.
- Ordered mounting squares to mount the motors.

This Week’s Goals

- Order joystick.
- Midsemester presentation preparation.

Project Difficulties

- None

Activities

- 2/23 – Met to research the best kind of motor. ~1 hr. each
- 2/24 – Advisor meeting, torque testing, and ordered motors. ~2 hr. each

Project Schedule

Preliminary Project Schedule	
Dates	Activities
Jan. 23-30	Form team roles and contact client. Individual research on mechanizing design.
Jan. 31 – Feb. 5	Client meeting. Contacted McMaster-Carr about motor/joystick and planned experiment.
Feb. 6 – Feb. 12	Got information on joystick and came up with initial plan for rotating mechanism.
Feb. 13-Feb. 19	Found more suitable motors and joystick.
Feb. 20-Feb. 26	Found motors powerful enough to work and ordered them. Also ordered motor controllers and mounting brackets.

Expenses

- **Motors Trossen Robotics MP-36016-385 \$37.50 x3 - \$112.50**
- **Motor Mounts Trossen Robotics M-800-PB-S3751-BB \$10.00 x3 - \$30.00**
- **Motor Controllers Trossen Robotics C-100-DC-BB-0518 \$46.50 x3 - \$139.50**

Total - \$282.00