## Holographic Acousto-optic System Hardware Overview

Text here

## Optical Layout

Optical connections and components for the system can be found below:

![Diagram of optical path.](opw\_acousto-optic\_OptSysDiagram.png)

## Electrical Layout

Electrical connections for the system can be found below:

![Diagram of electrical connections for system.](opw\_acousto-optic\_ElecSysDiagram.png)

## Included Files in this Repository

- [AOM plate](opw\_acousto-optic\_AomPlate.EASM)

- [AOM layout](opw\_acousto-optic\_AomPlateLayout.png)

- [AOM BOM](opw\_acousto-optic\_AomPlateBOM.xlsx)

- [Gumstick Altium Files link (Gen1 HW repo)](gumstick\_AltiumFiles.zip)

- [Various in vivo small animal holders and setups](Animal\_Holders)

## Additional acousto-optic repositories here:

- [Link to the software repository](https://github.com/OpenwaterInternet/opw\_acousto-optic\_sw/)

- [Link to the example data repository](https://github.com/OpenwaterInternet/opw\_acousto-optic\_data/)

**CONTENT BELOW THIS LINE WILL NOT BE UPLOADED, FOR INTERNAL USE ONLY**

References to internal documentation:

* [System Diagram: Explora System](https://docs.google.com/presentation/d/1rRZx-Zeb9d-SeEsPM93HuKSwMLC9dlkPFDumhUEPoF0/edit) (electrical)
* [System and Cable Diagram](https://docs.google.com/presentation/d/1OMUmyMH0CBC65dx5AiFYcU-KYqDmAUzc_nmjeOl2WXE/edit#slide=id.g5a395e573d_1_0) (electrical)
* [AOM Plate Optics - Brad's Updated Version](https://docs.google.com/presentation/d/1yQm91XfzzQqjXi4kEmaXgSDuMRZSxpxXwQA0fvBlLSU/edit) (diagram for AOM plate)
* [AOM Plate Optics](https://docs.google.com/spreadsheets/d/1ioYtH87rxavidycp41JXsWdxjZFjVeWBBdEXkTZVUkk/edit#gid=0) (BOM for AOM plate)
* <https://drive.google.com/file/d/1dAEwXLGkShRKUX7ZTBJsmyLCmCS8heJ3/view?usp=drive_link>
* [7000-0015 Aom plate.pdf](https://drive.google.com/file/d/1cDjT3w1PgNrEmrvweo0XKqS0BBISTNHV/view)
* [7000-0054 r0 Asm, Laser & AOM Plate Mounting.PDF](https://drive.google.com/file/d/1c7BAy5Zymqpf6VFyx7H_fw2fFacPmwc3/view)
* <https://drive.google.com/file/d/1d4fzMiDtqytta0XGbdkfST9s8MUAkHsR/view>
* [Octopus API](https://docs.google.com/document/d/1R-oSKfi2ZR7fbupIx_8YzUyXB2WZ84daDr8g7OkbW3A/edit)
* [24114 Users Manual Version1\_1.pdf](https://drive.google.com/file/d/1XAZcEgmtxZwkBshwgRpQ2SugSSYxKw5y/view) (Amplitude 2 laser manual)
* [Design Summary.docx](https://docs.google.com/document/d/1dbnvH_mBqZFNmXeyi0kAaY0gOAyK0X1P/edit) (Amplitude 1 design summary)