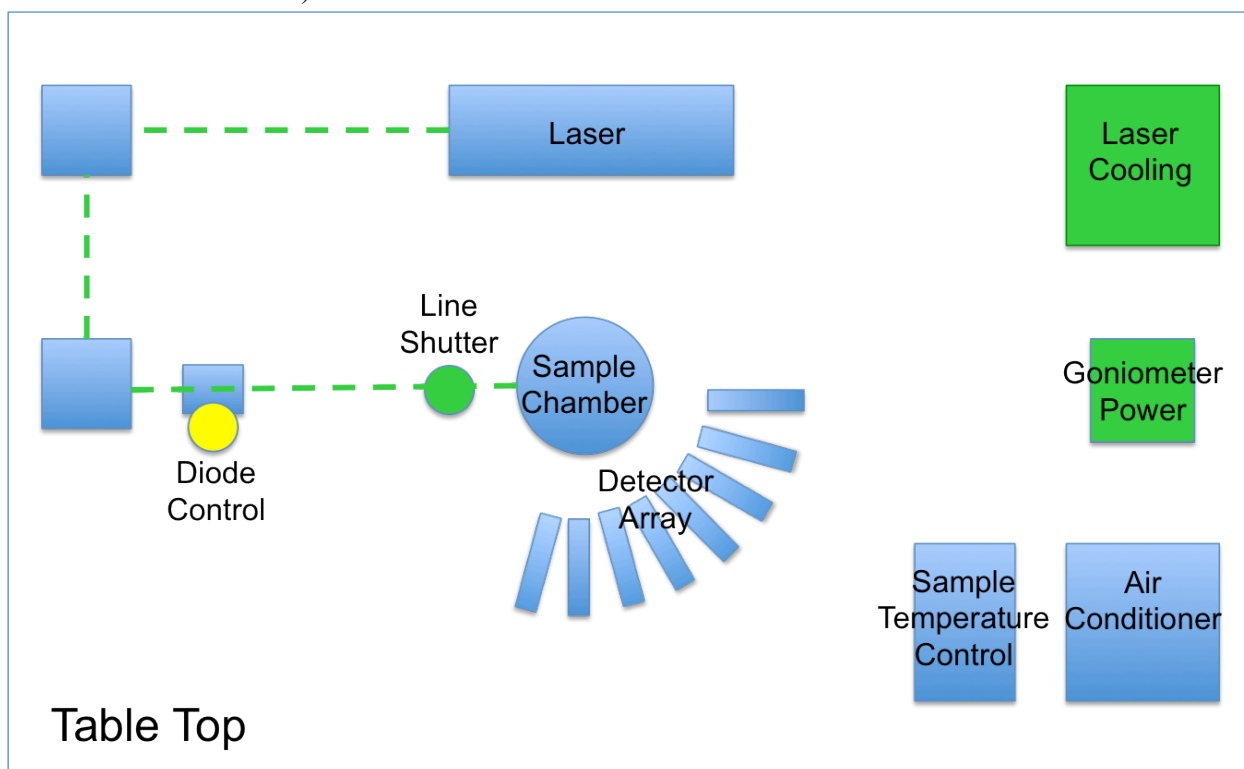


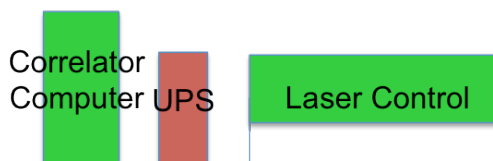
ALV-5000 Instrument Instructions

Hardware: Powering On (green elements in image need to be turned on or opened)

- Correlator computer: turn ON tan tower under laser table
- Goniometer control: turn ON small box on top of styrofoam
- Coherent laser cooling box: turn ON black box in back corner of table top
 - Use black “On/Off” switch above power cord [not “start/stop” button on top]
- Laser: laser control under table: turn key from “STANDBY” to “ON”
 - Laser power is to remain at 1.00 W; **do not** adjust power knob
 - If laser display says “Shutter Closed,” open with “Shutter Open” button
- Shutter on laser line: final control before sample chamber; must be opened to allow light into the sample chamber; it is recommended to set up experimental parameters before opening this final shutter.
- Diode control: clockwise lowers diode intensity; counterclockwise raises diode intensity
 - Diode must be adjusted with caution to not over-illuminate the detectors
 - Diode level is indicated in lower right hand corner of software
 - Do not allow counts (in upper right) to blink RED or exceed 500 kcps (whichever is lower)



Under the Table

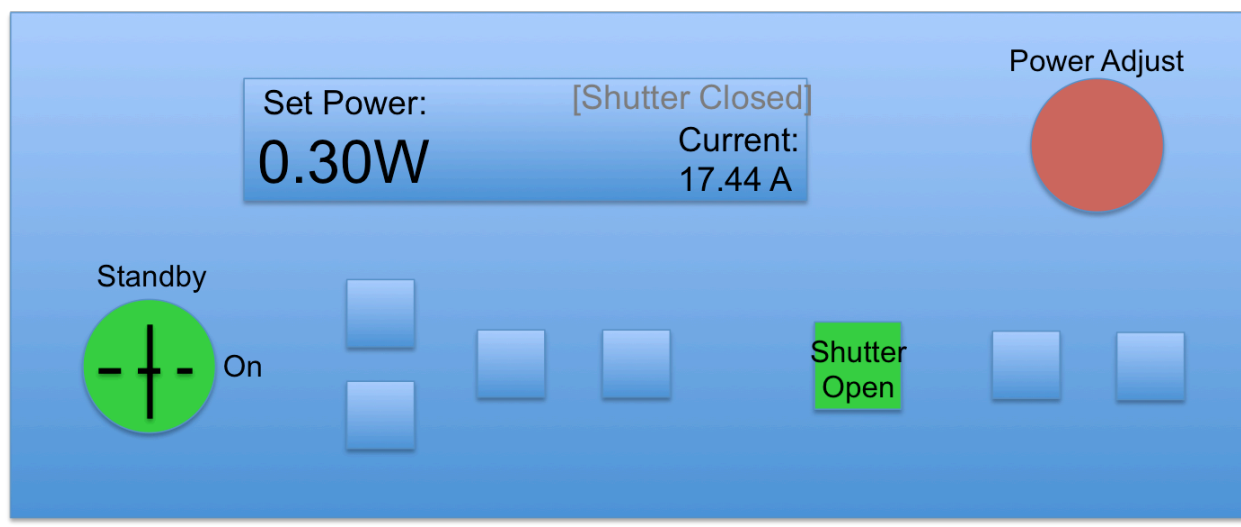


Schematic: Items in GREEN require attention before operating experiment; item in YELLOW may be used with caution; item in RED must remain ON at all times; do not turn off.

Notes prepared by Sara Hashmi (sara . hashmi @ yale . edu)

Hardware: Powering Off (green elements in image need to be turned on or opened)

- While software is still open:
 - Diode control: turn clockwise to lower diode to $\sim 2-4,000$
 - **Do not over-rotate diode control knob**; there is no need to lower the diode to 0.
- Close software window
- Shutter on laser line: Close.
- Laser control under table:
 - Close shutter with “Shutter Open” button so laser display says “Shutter Closed”
 - Turn key from “ON” to “STANDBY”
- Coherent laser cooling box: turn OFF black box in back corner of table top
- Goniometer control: turn OFF small box on top of styrofoam
- Correlator Computer: turn OFF tan tower under laser table

Laser Control

Schematic: Items in GREEN require attention before operating experiment; item in RED must remain AS-IS; do not adjust. When shutter is open, grey “shutter closed” indication does not appear.

In Case of Emergency, Call 911, or 2-4400 from the phone on the wall in the ALV room.

In case of questions during measurements or instrument usage, contact Sara at 508-596-0683.