

SPECIFICATIONS

Model: LAB .8 LAB 2.0

OPTICAL

Output Power:	0.5	1.8	mW minimum
@ 632.8 nm	0.8	2.2	Typical
TEM ₀₀ , CW	.95	4.9	Maximum
Polarization:	Random		
Beam Diameter:	0.34	0.57	Millimeters
Beam Divergence:	1.70	1.47	Milliradians

ELECTRICAL

Input Voltage:	10-14	Volts DC
Power Consumption:	9 11	Watts

Lab Lasers operate on standard 110 VAC via Power Adaptor supplied with Lab Laser.

PHYSICAL

Dimensions:	13.5	Length, inches
	2.4	Width
	3.2	Height
Weight:	29	Ounces
Optical Adaptor:	.750 Diameter x 32 Threads per inch	
Warranty	1 Year from date of purchase.	

SERVICE & REPAIRS

For service, maintenance, or repairs, return laser to LASER RESEARCH. You must include a copy of your original invoice. Tampering or attempting repair to the components of any LASER RESEARCH laser will void the warranty!

www.mi-lasers.com

meredith INSTRUMENTS

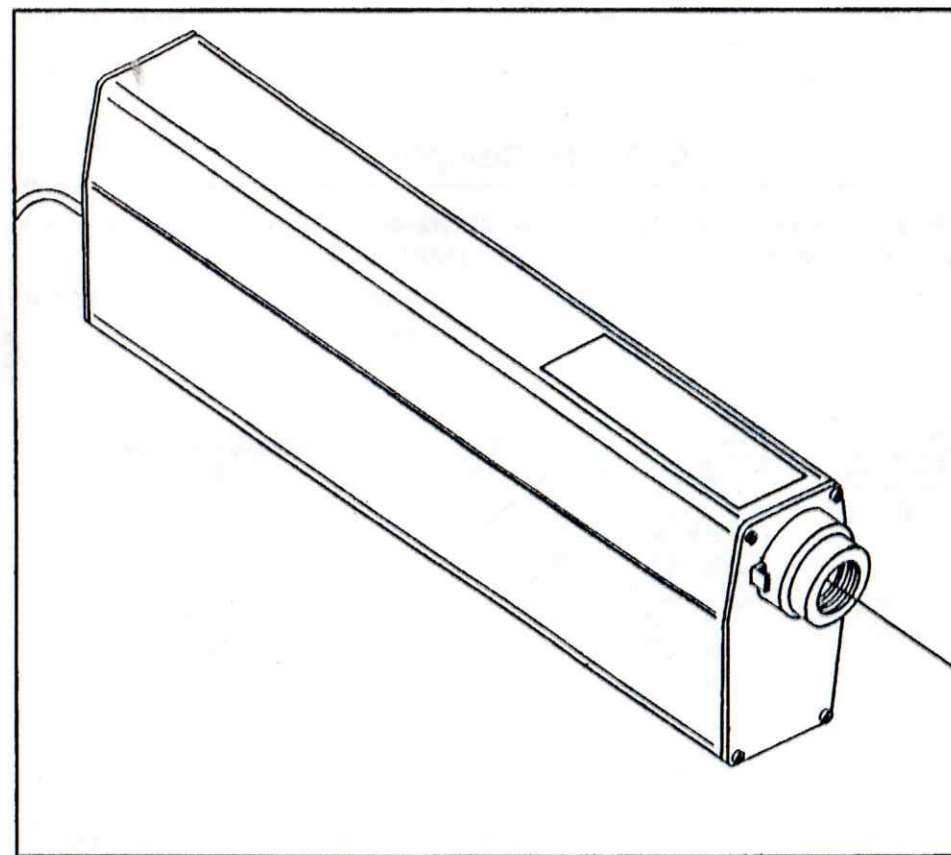
INSTRUCTION MANUAL

FOR

MODEL LAB .8

MODEL LAB 2.0

HELIUM NEON LABORATORY LASER



LASER SAFETY

IMPORTANT: Please read this Manual before attempting to use the Lasers described within.

Laser Research Lab Lasers have no user serviceable parts inside. These lasers should not be taken apart under any circumstances. Repairs and maintenance should only be performed by **Laser Research**.

WARNING: Lasers contain electrical circuits operating at high voltages. These voltages can be lethal!!!

CAUTION: Use of devices, adjustments, or performance of procedures other than those specified herein may result in hazardous optical radiation exposure.

Safety Recommendations For Laser Operation

1. Never look directly into the laser beam or any of it's reflections. Eye injury could result!
2. Never point the laser at anyone.
3. Never let anyone except those familiar with the laser and this manual operate the laser.
4. Always close the beam attenuator when the laser is not being used.

C.D.R.H. Compliance

All laser products manufactured by **Laser Research** comply with the performance standards for laser products under 21 CFR part 1040.

To help prevent accidental misuse, U.S. Government regulations require that the following labels be attached to the Laser as shown in Figure A.



LAB .8 model



LAB 2.0 model

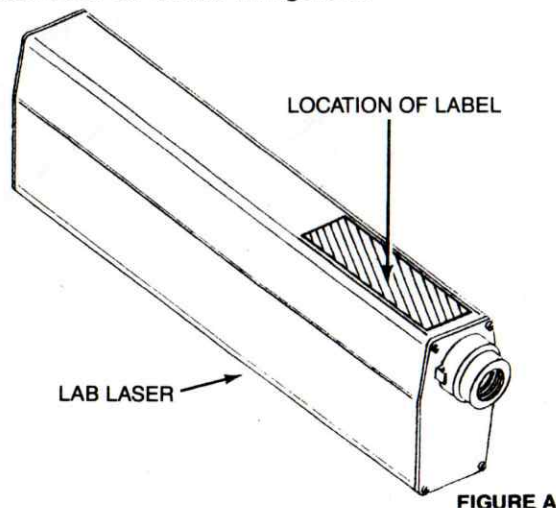


FIGURE A

LASER OPERATION

Both of the Laser Research Lab Laser models have the same controls. They operate as follows:

LIGHT ATTENUATOR: Its function is to mechanically shut off the laser light by means of a physical barrier. Figure B shows the attenuator in the open Position A. By moving the lever to the down Position B, the attenuator will block the light aperture.

OPTICAL ADAPTOR: Its function is to interface optical accessories with the Lab Laser. It accepts standard .750" dia. x 32 TPI OD accessories.

PILOT LIGHT: Its function is to provide a visual indication that the Laser is on and capable of emitting laser light. See Figure C.

POWER SWITCH: Its function is to turn the Laser on and off. When the switch is out, the Laser is off. By pushing the switch in, the Laser will turn on. Push the button again, and it will return to the off position.

POWER INPUT JACK: This accepts the plug on the AC power adaptor supplied with your Laser. Push the plug into the Laser and then the AC adaptor into a 110 VAC wall outlet. The Laser is now ready to operate.

The Lab Laser can be battery operated. A 12 volt battery with a capacity of 1 amp or more is required, along with a power input plug that matches the one on the AC adaptor supplied with the Laser. Observe the correct polarity as marked on the AC adaptor. This may vary from Laser to Laser.

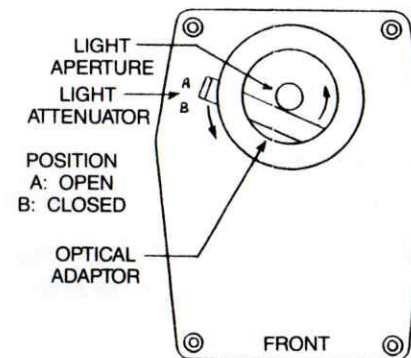


FIGURE B

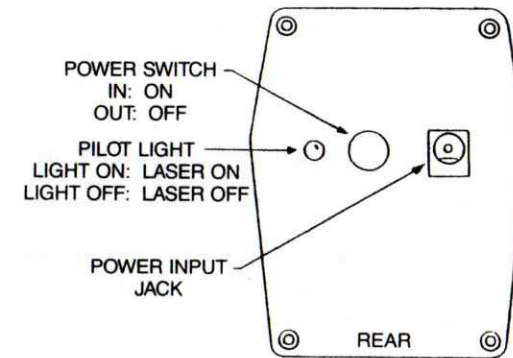


FIGURE C