

INSTRUCTIONS FOR #CWL5 CLASS IV BURNING LASER

System is a two part Class IV Laser in full compliance with 31CFR 1040-10 And 11.

WARNING!! Protective eyewear must be worn when operating this device. Available thru **KENTEK @ 1 603 435 7201 ! Do not point at inhabited areas unless occupants are wearing protective eyewear!!**



VISIBLE and/or INVISIBLE LASER RADIATION
AVOID EYE OR SKIN EXPOSURE TO DIRECT
OR SCATTERED RADIATION

SYSTEM SPECIFICATIONS:

Input is 12vdc 1.5 amp Wall Adapter

Output Power up to 1 Watt Continuous+

Output Wavelength is .8 to 1.1 microns

Output Focal Length is adjustable around 20 mm

*Temperature Compensation-NONE

Optical Feedback-NONE

Current Regulation less than .1%



CLASS IV LASER PRODUCT

Note mating cable for current monitor jack on side of unit. Use digital voltmeter. 100mv =1amp

Note that the lens system allows far field focusing of over 100 cm and can be adjusted by sliding focus to desired position and securing with screw. You may replace the lens with a shorter focal length for closer work.

OPERATING STEPS

1. Carefully unpack and check for damage
2. Place a piece of carbon paper around a block of wood and secure with scotch tape. Set laser about 1 to 2 " from the target and secure into position. You may also use a piece of black plastic or paper for the target.
3. Plug in and flip toggle switch on noting fan in control housing coming on.
4. Rotate safety key switch cw and note LED coming on. Note a delay of 10 seconds before red LED "emission indicator" comes on. Laser output should immediately start burning carbon paper as noted by a pinpoint of smoke and fire! **Safety glasses should be used**
- *5. Allow laser head to cool off if it becomes hot above 100F. You may air cool for continuous operation.

NOTES

This low cost system utilizes our proprietary **precision voltage and current controlled** drivers with **soft start** and **diode transient protection**. This particular design does not use any optical feedback and therefore must be operated within normal room temperature ranges. Laser diode is kept cool by a built in heatsink and its associated aluminum tubular housing. The internal circuit is cooled via a small muffin fan. System is designed for continuous operation however should be periodically checked for excessive heat especially over long operating periods.

It is important to allow system to temperature stabilize before using. A cold laser diode may over power the internal diode optics destroying the device. An advantage to optical feedback is to control this "over power".

This laser is an excellent driver when used as a frequency doubling system producing an **intense green laser beam** of over 200mw continuous!!

It can be used with a .8 micron diode for an **ultrabright illuminator** for night vision.

When battery powered, It can be used as a spot illuminator for a **experimental super working long range "Laser Window Bounce" listening system** used in conjunction with our #LLR30 optical receiver. **Danger on power level used as collateral radiation is hazardous.**

Laser can be used for **precision burning and cutting** of light materials. It is an excellent candidate for precision laser surgery but this particular device is not intended for such!

Device is available in a **ray gun** configuration for **directed energy beam** research and experiment

Separate data and instructions will be available for these and other projects using this laser system.

INFORMATION UNLIMITED

Tech help 1 603 673 4730 Fax 1 603 672 5406

PO Box 716 Amherst NH 03031
Web site at <http://www.amazing1.com>