Full Spectrum 5th Generation Hobby Laser 20"x 12"

NEVER LEAVE THE LASER CUTTER UNATTENDED WHILE CUTTING. There is always a slight chance of the laser igniting your material and a fire starting! Staring at the laser light for long periods of time is not recommended, but keep an eye out for fire!

If a fire does start, immediately shut off the laser. If the fire is small enough, a couple of squirts from the water bottle should suffice. Try to keep water away from electronic parts and laser tube.

Use fire extinguisher if there are any doubts.

- 1) Make sure ethernet cable connects laser cutter to computer.
- 2) Turn on laser cutter with light switch to left.
- 3) Let laser boot up (about a minute)
- 4) Open RetinaEngrave software.

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5) Note IP address on laser cutter display screen.



- b) If 0.0.0.0, turn off laser cutter with light switch, wait 10 seconds, and turn back on.
- 6) Specify IP address in RetinaEngrave to connect to laser cutter.

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8) Make sure lower left corner says connected to correct IP and "Homed."

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9) Focus laser head with 1 focusing billet (any one of the black disks)--Place focusing disk on TOP of material to be cut. Loosen thumbscrew and gently lower or raise laser nozzle until it is resting on top

of the disk. Gently retighten thumbscrew.

10) Use Jog Buttons in RetinaEngrave to position laser head to upper left-hand corner of material.

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- 11) Use printer driver in drawing software (Illustrator, Inkscape, or CorelDraw) to send drawing to RetinaEngrave software. Note: all line strokes should be .25 inches. Also note: RetinaEngrave must be open first.
- 12) Switch to Vector Cut tab in RetinaEngrave.

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13) Set Speed and Power of laser cutter for your material (consult table) in RetinaEngrave.

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14) Use Perimeter button to test that design fits on material. The nozzle will move to the four corners of your material without firing laser.

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15) If everything looks okay, push the green arrow button in RetinaEngrave to start cutting.

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- 16) If you open the clear plastic cover, motor will continue to move, but laser will stop firing as a safety measure.
- 17) The big red button on top of the machine will immediately stop all operations. Turn clockwise to release.
- 18) When finished, turn off everything with the light switch.