Epilog Laser Manual

Operating Guide

Guide edited from Kennesaw State University
Epilog Laser Manual

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NOTICES

DO NOT CUT MATERIALS THAT HAVE NOT BEEN APPROVED.
Using unapproved materials damages the equipment! This will cost you your laser privileges and possible fines

- Approved Materials: Check page 179 in the System Manual for full list
  - Acrylic / Plexi2 glass
  - Basswood –(1/8 thru 3/8)
  - Chipboard
  - Matte Board
  - Museum Board
  - Paper
  - Plywood 1/8 inch
  - Solid Wood 1/32 – 3/8 cutting
  - Solid Wood over 3/8 scoring only
  - Sand ply 1/8” to 1/4” (only has 3 layers)
  - White Museum Board
  - White Poster Board
  - Wood veneers – not glued

- Anything else ASK !!!!

ALWAYS turn on three switches before sending a file to the laser.

There are THREE Switches.
The switches are located on the right side of the laser cutter. Look at sign on the all on the right for more information.

You MUST turn on the Laser Cutter, Air Compressor and Fume Extractor

OBSERVE

- You must watch the laser the entire time it is cutting your materials.
- Leaving the machine running unattended will cost you your use privileges for the SEMESTER. No exceptions.
- You are watching to make sure it does not catch the material on fire, which can happen in just a few seconds!
- Also watch for excessive flame, sparks, or smoke that could deposit soot on the lens.

If you are the last one out, please TURN OFF THE FANS
The switch is located right of the the laser cutter
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**Laser Reservations**

**Reservations are limited to 2 hours per day per student.**

**Reservations are only valid for the first 15 minutes of the hour.**

Lasers unclaimed by 10 minutes after the hour will be available for others to use. The two hour rule will not apply to the use of unclaimed laser time.

**Sign in**

- There will be a sign in sheet in the laser area. Please sign in when you arrive in the laser area so that the staff knows you have honored your reservation time.

**Failure to show up for reservations**

If you fail to show up for your reservation (by 10 minutes after the hour), or fail to let a staff member know that your reservation is being used by another student, you will be blocked from using laser cutter for two days.

**The reservation system is on-line.**

It can be found at [lascutterart211.youcanbook.me](http://lascutterart211.youcanbook.me)

Or at the [mhc makerspace website](http://mhc.makerspace.youcanbook.me)

**Laser Cutter**

Click on any time to make a booking.

Laser cutter MAY ONLY BE USED with an authorized supervisor present.

Please contact Shani Mensing with any questions or concerns

http://commons.mtholyoke.edu/makerspace/contact/

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Safety and Conduct

Clean-up
- You must clean up your scraps after you finish
- Clean all dribbles/detritus/debris/scrap/cut parts from inside the machine
- Clean the floor area around the laser and dispose of all garbage cutouts etc.

Workspace
Space is limited and other courses use this room. Place reusable material back on material table in assigned location. Unreusable material is to be tossed in metal trash can.

Signing into Laser Cutter

Laser cutter Mac computer is protected by a password. If you are scheduled to cut that day the laser cutter will be unlocked for students that have gone through basic laser cutting training.

If you wish to be trained on the laser cutter you must get in contact with Shani Mensing @ mensi22s or with one of the other authorized faculty and staff. List of these authorized personals can be found on the wall right of the laser cutter

In order to be an authorized personal you must be a MHC faculty or staff member and have gone through both the laser cutter training and fire training.
Using Laser Cutter with Adobe Illustrator

Laser cutter works off of Adobe Illustrator

Dimensions of the laser cutter is 20 x 32 so when opening a new Ai file make the dimensions of your project 20 x 32

Cut: If you want to cut your lines must be smaller or equal to .025
Otherwise it will be recognized as something that should be engraved

Engrave: Any line larger then .025 or fill will be translated as something that should be engraved
Print

1) When you are ready to print head to File -> Print

2) Then click on Setup on the bottom left

3) Then select Preferences to open the Epilog printing preferences
Adjusting Settings

NOTE:
The slower the speed the deeper the cut/engraving
The more power the deeper the cut/engraving

Raster: Your engraving settings. Set your speed and power so that your material engraves. These settings differ depending on what material you are using. For suggested settings look at the book page 179-183

Vector: Your cutting settings. Set your speed and power so that your material cuts. This should be more powerful then your engraving setting. These settings differ depending on what material you are using look at book page 179-183 for suggestions.

Press OK when finished. Then select print on the rest of the opening pages. This should send the job to the laser cutter
Focus

Before you print make sure to focus the laser cutter so that the focusing tool touches your material. If you are unsure of what this means ASK!!

Focusing that laser cutter incorrectly can result in a FIRE.

Place the focusing tool in the laser cutter

Move the settings to Focus and move the toggle up and down to rise and lower the bed.

Make sure to remove the focusing tool once you are finished and then close the laser cutter fully and press GO.
In case of FIRE

FIRST: Hit the RED EMERGENCY STOP BUTTON the location of the button is marked on the image

- If the fire is very small,
  - open the lid and using the fire blanket, quickly remove the material from the laser
  - Place the material down and cover it with the fire blanket
  - Call for staff member in Art 211B

- If the fire is larger or you can’t grab the material to remove it,
  - Call for staff member in Art 211B
  - grab the fire extinguisher from the wall mount,
  - remove the pin, aim at material and apply just enough to put out the fire.

How to use fire blanket

1) Remove the fire blanket by pulling up on the tab

2) Roll the corners of the blanket over your hands to protect them.

3) Once you have the blanket secured over your hands, place it over the flames. Do not throw it, but lay it down gently. Start with the nearside of the flames and move in. Throwing the bottom of the blanket on the far side first can cause flames to creep up over the blanket, worsening the situation.

4) Leave the blanket at the heat source until flame is suffocated. This should take about 15 minutes. Do not attempt to move or touch the blanket until it’s cool again.