

fablab

Manual

fablab@uni-bremen.de

This manual gives you an overview and short introduction about how these fancy machines work.

Please read these instructions carefully and follow them as explained. This will guarantee that your products look and feel great and also prevent the machines from damage.

If you encounter a problem with the machines, do not try to fix it yourself, please get in contact with one of the fablab managers.

Contacts

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Introduction

Please read the following pages carefully!



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<http://fab.cba.mit.edu/about/charter/>

FabLab Charter

What is a fab lab?

Fab labs are a global network of local labs, enabling invention by providing access to tools for digital fabrication

What's in a fab lab?

Fab labs share an evolving inventory of core capabilities to make (almost) anything, allowing people and projects to be shared

What does the fab lab network provide?

Operational, educational, technical, financial, and logistical assistance beyond what's available within one lab

Who can use a fab lab?

Fab labs are available as a community resource, offering open access for individuals as well as scheduled access for programs

What are your responsibilities?

- safety: not hurting people or machines
- operations: assisting with cleaning, maintaining, and improving the lab
- knowledge: contributing to documentation and instruction

Who owns fab lab inventions?

Designs and processes developed in fab labs can be protected and sold however an inventor chooses, but should remain available for individuals to use and learn from

How can businesses use a fab lab?

Commercial activities can be prototyped and incubated in a fab lab, but they must not conflict with other uses, they should grow beyond rather than within the lab, and they are expected to benefit the inventors, labs, and networks that contribute to their success

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Laser-Cutter Zing-6030 / 30 Watts



Do not leave
the laser-cutter unattended!

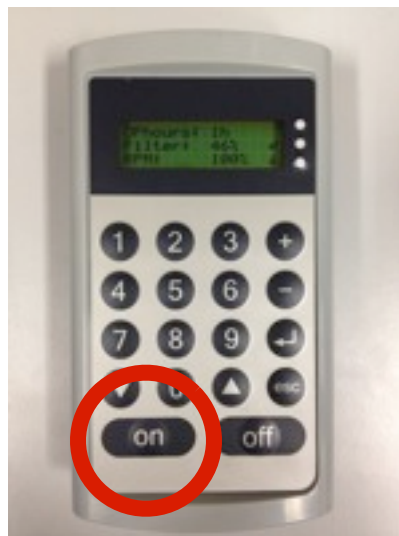
How to power on the laser-cutter?

1. Turn the power switch on



2. Activate the filter system by using the remote control

Press on key.



3. Activate the compressor by using the remote control

Navigate with the arrow-keys (up/down) to section "switch module".

Press the plus key (+) to set the value to "yes".

Confirm by pressing the return key.



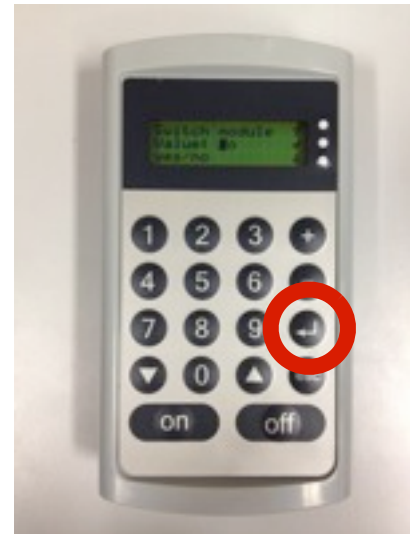
How to power off the laser-cutter?

1. Deactivate the compressor by using the remote control

Navigate with the arrow-keys (up/down) to section "switch module".

Press the plus key (+) to set the value to "no".

Confirm by pressing the return key.



2. Deactivate the filter system by using the remote control

Press off key.



3. Turn the power switch off



Put the remote control back into its holder!

Important rules

1. Do not leave the laser cutter unattended.
2. Do not use PVC, Teflon, PFA, and other plastics that contain chlorine, bromine, or fluorine.
3. Before you start, please adjust the focus of the laser.

Adjusting the focus of the laser.

1. Open cover
2. Press button "X/Y Aus" on the control panel
3. Move the carriage by hand to the location where you would like to focus.
4. Release the focus spring from its holder on the x-beam.
5. Use up- and down-keys to adjust the height of the table.
6. Your machine is in focus once the end of the spring touches your material.
7. Swing the spring back into its holder.
8. ATTENTION: Move the laser head to the very right by gently pulling the belt (X-axis). Move the carriage to the very top of the machine (Y-axis).
9. Press "Reset".

ATTENTION: If you hear a strange noise, turn the machine off immediately. The reason for this might be, that you haven't moved the carriage and the laser head to the top-right position as mentioned in step 8.

10. Close cover. You are ready!

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LaserDraw

For additional information and a short video introduction, please visit this website:

<https://www.cameo-laser.de/material/laserdraw-90.html>

You can download a demo version of LaserDraw here:

<http://demo.laser-workshop.de/LaserDRAW/LaserDRAW.zip>

Please follow these steps very carefully. Otherwise you might damage the machine!

Rules of thumb

1. Use hairlines for cutting (0,001 inch), every thicker line, filled object, or picture will be engraved! (Inkscape: 0,1px, Corel draw: Hairline, Adobe Illustrator: hairline).
2. Before you start, please adjust the focus of the laser.