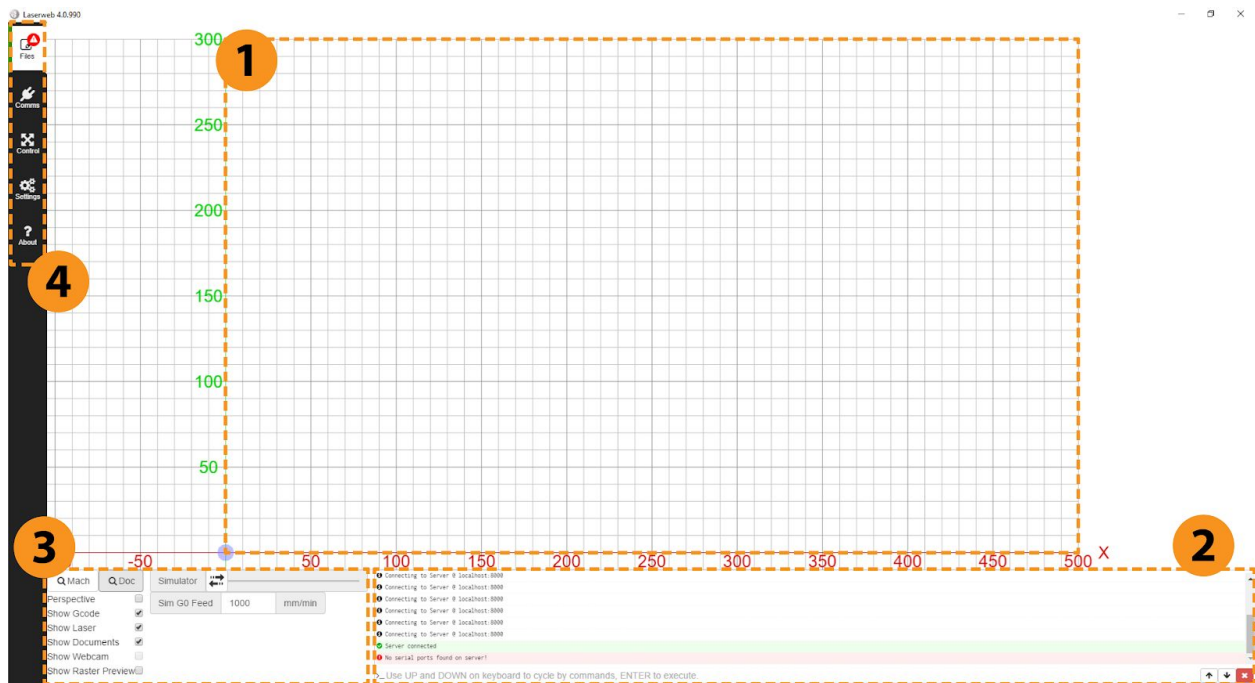


Laserweb Interface Overview

The Laserweb Interface



The Laserweb Workspace.

A virtual representation of your machines working area.

Command field / Console.

This area allows you to send commands directly to your machine and view the information it sends back.

Workspace visibility panel.

Here you can toggle the visibility of a variety of elements within the Laserweb workspace.



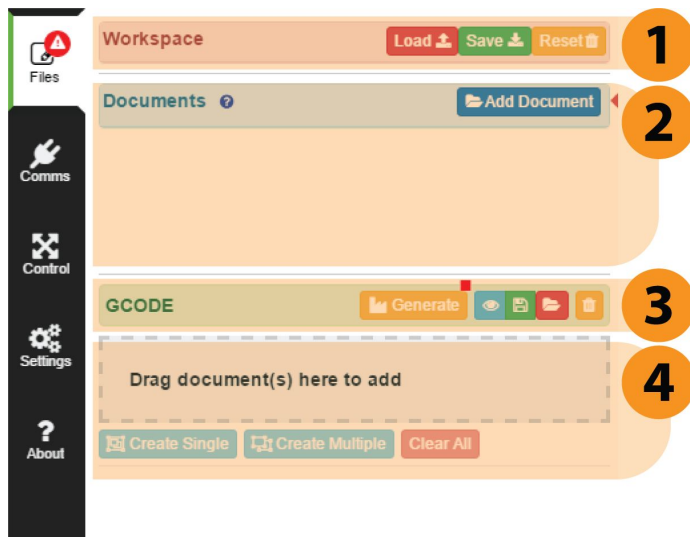
Tapping the Mach (Machine) or the Doc (Document) buttons will zoom to the machine workspace or zoom to fit the selected document respectively.

- **Perspective** is an option that allows the Laserweb Workspace to be viewed with perspective.
- **Show G-Code** is an option that allows you to view the laser's programmed travel path, the visibility of the laser's travel path over time can be altered using the simulator slider.
- **Show Laser** is an option that will place a real time indicator of the laser's current position within the Laserweb workspace.
- **Show Documents** is an option that toggles the visibility of your documents.
- **Show Webcam** is an option which toggles the visibility of the feed from a webcam if you have one installed
- **Show Raster Preview** is an option which displays your raster image with any adjustments made to it through the 'Laser Raster' operation.

Laserweb Dock.

The Dock contains a series of panels which will be crucial to your workflow.

The **Files Tab** is where you import your design, assign laser operations and generate your G-Code.

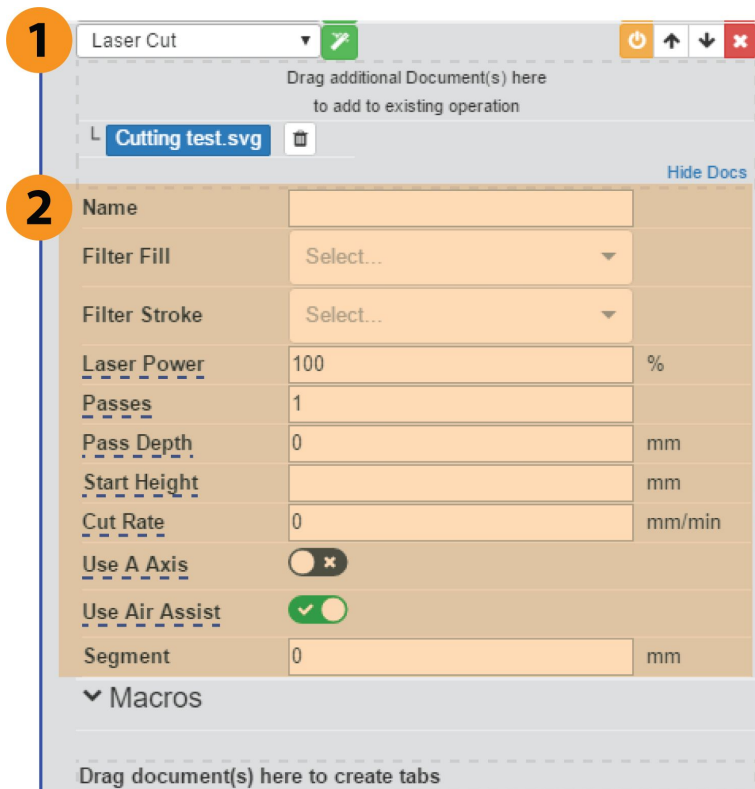


1. This is where you can save your Workspace or load one that has been saved previously. (A Workspace contains your Design File with any Laser Operations and G-Code you have generated).
2. This is where you load in and view your Design Files.
3. G-code is the language your machine understands. Once your Laser Operations are prepared, generate the G-code here. This prepares what the software will send when you press the Run Job Button in the Control Tab.
4. Drag a Design File into this section to create a Laser Operation. The two most commonly used Laser Operations are Laser Cut and Laser Raster. (See below)

Laser Operation – Cutting

This Laser Operation option is available from the dropdown menu when a .svg file is imported. It is ideal for engraving lines and shapes or cutting through material.

Below are some brief descriptions of the commonly used settings.



An operation can be 'turned off' by pressing the yellow power button on the right.

Turning off an operation excludes it when you generate G-code.

Operations can also be shuffled up or down in the order of what get performed when by using the arrow buttons.

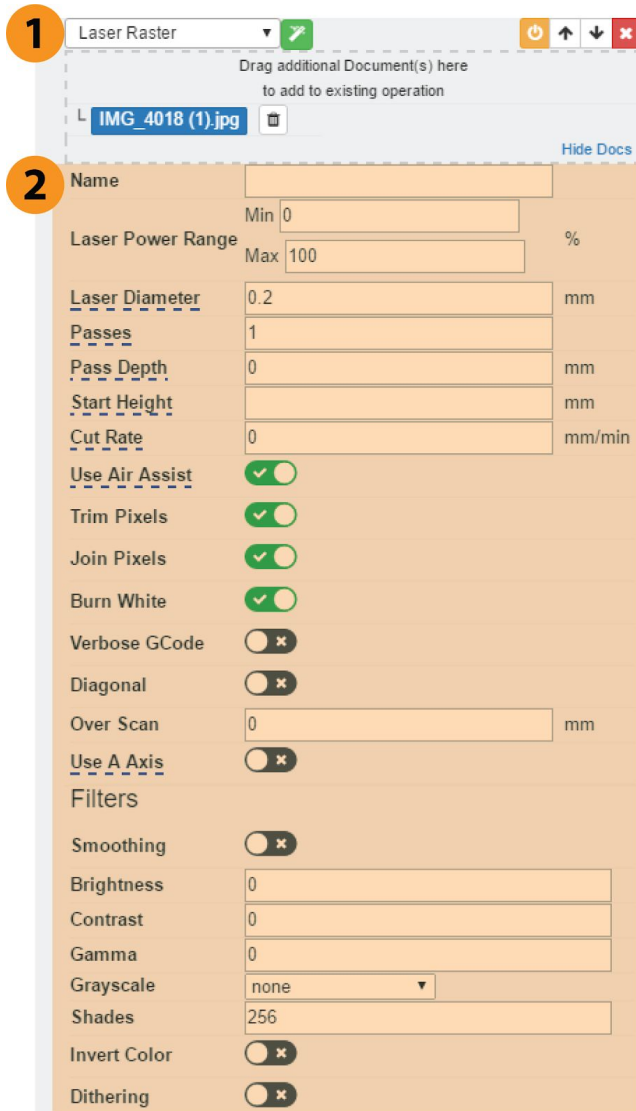
Laser Operation settings.

- Title for the Laser Operation.
- **Filter Fill & Filter Stroke.** If your Design file has been prepared in different colours, you can apply a Laser Operation to specific colour (eg. red = outlines, green = patterns, blue = inside shapes).
- **Laser Power.** 0-100% Laser power for the operation, changing his setting will affect the depth of a cut or the darkness of an engraving.
- Increasing this number will repeat the Laser Operation, Helpful for dealing with thicker or stubborn materials.
- **Pass Depth.** This setting will lower the height of the laser between passes, this is a fine tuning option that can help users achieve better cutting depth.
- **Start Height.** This setting tells Laserweb how tall your Workpiece is. Input the thickness of your material here. (Don't forget to add 10mm for the cutting mat if you're using
- **Cut Rate.** This is the speed the laser travels across your Workpiece. A low value means the laser interacts with the Workpiece longer.
- **Use A-Axis.** Not applicable to the Vertigo CNC machines
- **Use Air Assist.** Not applicable to the Vertigo CNC machines
- **Segment.** This value controls the detail curved vectors are engraved at. For complex designs it may be useful to slightly increase this number to improve results. Set to zero for highest detail.

Laser Operation – Raster

This Laser Operation option is available from the dropdown menu when a .jpeg, .png or any raster file is imported. It is ideal for engraving photos or lines of text.

Below are some brief descriptions of the commonly used settings.



An operation can be 'turned off' by pressing the yellow power button on the right. Turning off an operation excludes it when you generate G-code.

Operations can also be shuffled up or down in the order of what get performed when by using the arrow buttons.

Laser Operation settings.

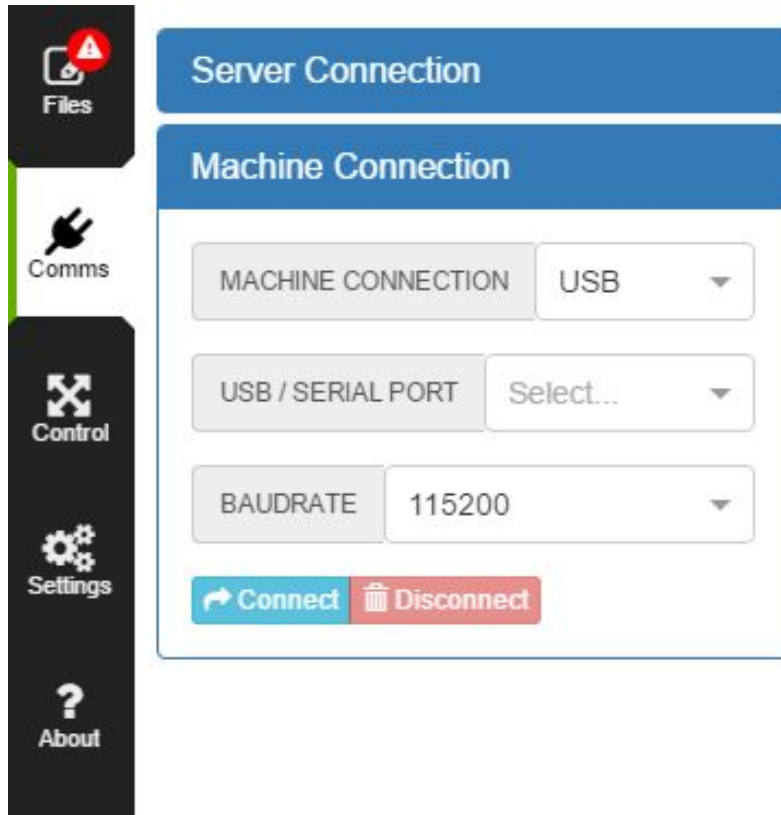
- Title for the Laser Operation.
- **Laser Power Range.** 0-100% Min and Max Laser powers for the operation, changing his setting will affect the maximum darkness of an engraving.
- Increasing this number will repeat the Laser Operation, sometimes a better result can be achieved with two light passes rather than a single dark pass.

Also useful if trying to make deeper engravings or lithophanes

- **Pass Depth.** This setting will lower the height of the laser between passes, this is a fine tuning option that can help users achieve better depth.
- **Start Height.** This setting tells Laserweb how tall your Workpiece is. Input the thickness of your material here. (Don't forget to add 10mm for the cutting mat if you're using
- **Cut Rate.** This is the speed the laser travels across your Workpiece. A low value means the laser interacts with the Workpiece longer.
- **Use Air Assist.** Not applicable to the Vertigo CNC machines
- **Trim pixels.** This eliminates laser movement on areas outside of your design that do not need engraving. It helps save job time.
- **Join Pixels.** This will allow Laserweb to issue a single command for a line of pixels which have the same intensity. This should always be left to 'on'.
- **Burn white.** This checkbox tells the software to ignore white pixels when generating G-code. If your design File has a lot of white space turning this setting to 'off' can greatly decrease your engraving time.

The Comms Tab

This is where you connect to your machine



The Control Tab

contains the buttons you need to order your Machine around. The upper area displays status information of your Machine

The screenshot shows the Control Tab interface with the following elements:

- Files** (top left icon)
- Comms** (second icon from top)
- Control** (third icon from top, highlighted)
- Settings** (fourth icon from top)
- About** (bottom icon)

At the top, status indicators show **Not Connected** and **Queued: 0**.

The main control area includes:

- 1**: Home all button (house icon)
- 2**: Run job button (play icon)
- 3**: Abort job button (stop icon)
- 4**: Jog buttons for X, Y, and Z axes (left, right, up, down arrows)
- 5**: Jog speed selection buttons (0.1mm, 1mm, 10mm, 100mm)
- 6**: Jog speed input fields (X/Y Jog: 6000 mm/min, Z Jog: 1000 mm/min)

Other visible controls include:

- Position readouts: X: 0.00 mm, Y: 0.00 mm, Z: 0.00 mm
- Feed rate (F): 100 %
- Spindle speed (S): 100 %
- Laser Test button
- LIVE JOGGING **DISABLED** toggle
- Goto XY zero and LASER OFF buttons

1. **Home Button.** This will return the laser carriage to the upper left corner of the workspace.
2. **Run Job Button.** This button sends your machine the G-code you generated in the Files Tab. The software streams these commands so keep your computer connected!
When you press this button and a Job is running the button transforms into a pause button which can be used to temporarily stop a job before resuming from where you left off.
3. **Abort Job Button.** This button stops the software sending commands to your Machine, for safety it also puts your Machine into an alarm state which can be turned off by pressing the abort button again. An aborted job cannot be resumed and must restart from the beginning.
4. **X and Y Directional movement Buttons.** These buttons will move your laser around the Workspace.
5. **Z Directional Movement Buttons.** These buttons will move your laser up and down.
6. **Movement Distance Buttons.** These buttons change the distance increment that the Directional Movement Buttons move the laser around.