

Manual Lasercutter

ENG

Quick startup guide

1. Set up your artwork in your software program (e.g. Illustrator).

To cut: 0.025mm lineweight

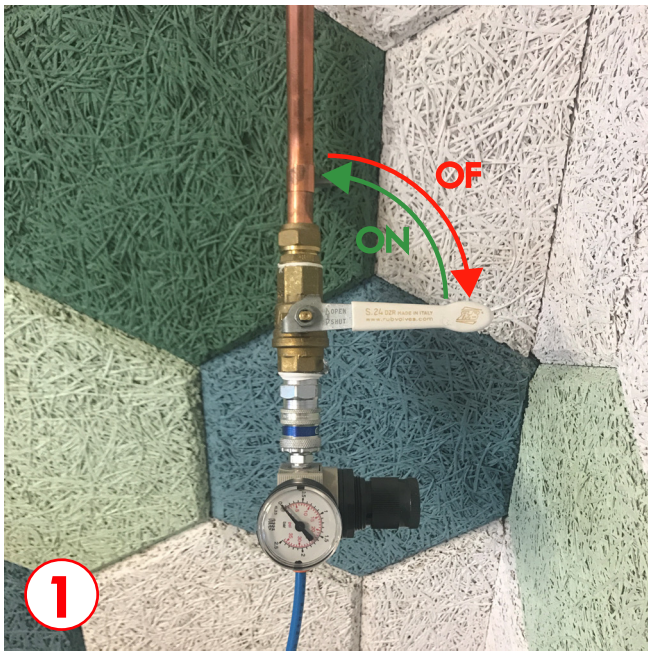
To engrave: 0.150 mm lineweight or thicker

Maximum size of material: 406 x 305mm

2. Turn on the high-pressure air (**Picture 1**).
3. Turn on the exhaust (**Picture 2**).
4. Turn on the power to your laser (**Picture 3**) and wait for "Beep" to note the machine is initialized.
5. Open the door and place your material on the table in the upper left corner (make sure the table is low enough to accommodate the material, how to change the height of the table see the "Set focus" instructions).
6. Set focus.* See page 3
7. Close the door.
8. From Illustrator press **Ctrl + P** to print.
9. Click on **Setup**. Make sure your Printer Destination is the "**Epilog Engraver Win32 Zing**"
10. Click on **Preferences** to go to the **Dashboard** (see more information on Dashboard settings on page 4).

More information on Dashboard settings for the material you are using see the **Speed and Power Recommendations** on page 5.

11. Click **OK** to exit out of the Dashboard driver with the settings in place.
12. Click **Print** to print the page to your laser.
13. The job you sent over most recently is shown in the LCD display on the control panel (**Picture 4**).
14. To run that job, just press the **GO** button on the keypad on the control panel (**Picture 4**).
15. To run a previous job, press the **JOB** button on the keypad and then scroll through the sent jobs by pressing the **Up and Down Arrow Keys**. The corresponding job names will be displayed in the LCD Display Panel. If more than one job of same name is sent over, it is numbered after the word Job.
16. Press **GO** when the job to be run is displayed in the LCD Display Panel. The job will now start.
17. If the printing seems out of place see **Home position** at page 4.



* Set focus on your material

In order to engrave or cut a crisp clean image, your material must be the correct distance from the bottom of the focus lens. Setting the distance of the focus lens to the top of your material is the process of focusing. Once your material is just touching the focus gauge, you are in correct focus.

How to set focus along the X-beam:

1. Release the focus spring from its holder on the X-beam (**Picture 5**) so it swing freely over your material.
2. Press the **Focus button** so activate the **Up and Down Arrow Keys** on the control panel (**Picture 4**).
3. Pressing the **Up or Down Arrow Keys** moves the table.
4. Your machine is in correct focus once the end of the spring just touches your material.

Tip!: Let the focus spring swing back and forth while raising the table. As the table moves up and gets close to the correct focus distance the spring will just touch your material and stop swinging.

5. Swing the spring back into its holder so it does not touch the engraving material while the job is running.
6. Press the **Reset** button to exit out of focus mode before starting your job.

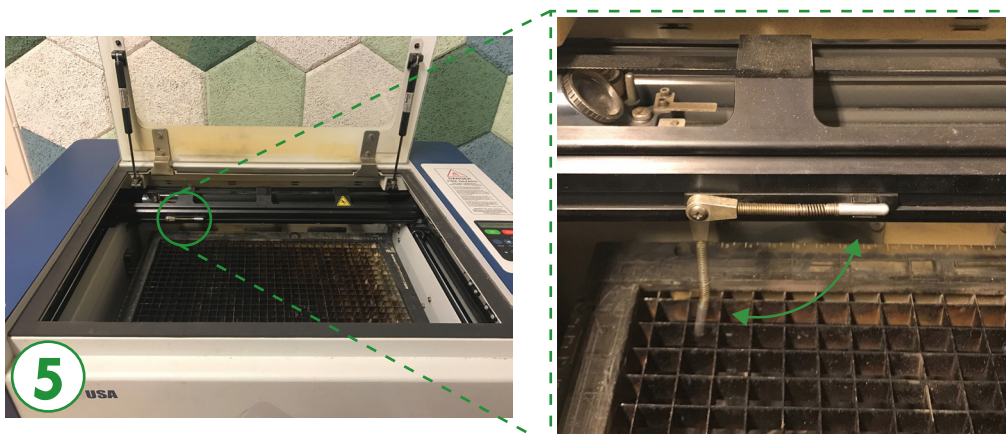
How to set focus anywhere on the table:

If you wish to focus at any point on the table you can do so by disabling the axes and moving the carriage by hand to the location where you would like to focus. To do this, use the following key sequence:

1. Press the **XY Off key**. This disables the X and Y axes and you can now move the carriage by hand to any point on the table.
2. Press the **Up and Down Arrow Keys** on the keypad to move the table up or down to set the proper focus height.
3. Press the **Reset** key to exit focus mode.

Tip!: When using this method it is often convenient to turn on the red dot pointer (on the control panel) to help you see where the carriage is moving.

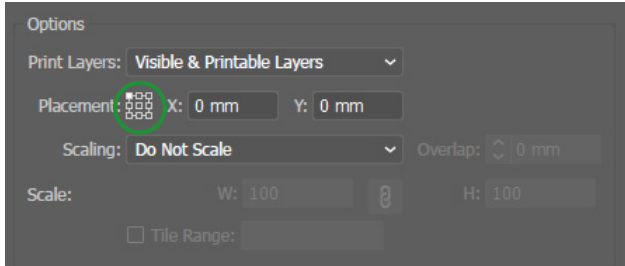
Be careful to avoid touching the optics when you are moving the carriage by hand!



Home position

The job setup in Epilog laser system has a prime reference point that is in the upper-left corner of the laser table. This is the 0,0, or "Home" position. All artwork and material placement is normally referenced from here. Keep this 0,0 point in mind when measuring and setting up your work.

Back at the first pinting dialog box, make sure you have the uper left corner marked in the placement section.



How to use the Epilog Dashboard

1. Check that **Piece size** is correct.
2. Choose **Job Type**
3. Set the setting for **Power, Speed** (and **Freq** when to cut). More information on Dashboard settings for the material you are using see the **Speed and Power Recommendations** on page 5.

Job Types:

- **Raster Mode** -This mode will only engrave. You cannot cut from this mode. Raster engraving can best be described as very high resolution dot matrix printing with a laser. Raster engraving is used to create highly detailed graphic images. The laser head scans back and forth, left to right, engraving a series of dots one line at a time. As the laser head moves down line by line, the dot pattern forms the image that was printed from your computer. You can raster engrave scanned images, text, clipart, photographs, or line drawings. To engrave use 0.150 mm lineweight or thicker , it will work with resolution at 400, 500 and 1000 DPI. To make the engraving time more efficient se **Artwork orientation When Engraving.***
- **Vector Mode** -This mode will only cut. You cannot engrave from this mode. Vector cutting is a continuous path that follows the outline, or profile, of an ector cutting is normally used to cut completely through materials such carboard, paper, etc. It can also be used for quick marking of characters patterns. You can vector cut with the laser by setting objects and text to be unfilled and drawn with a 0.001-inch (0.025mm) outline. The thin outline will produce a vector cut.
- **Combined Mode** - Properly setting up your artwork you can both engrave and cut from this mode. Nevertheless, it is recommended using first **Raster Mode** for your artwork that you want to engrave and, then without moving your material, then using **Vector Mode** for what you want to cut inseed of using **Combined Mode**.

Artwork Orientation When Engraving*

You can engrave using landscape or portrait modes. Depending on the artwork, you can increase your efficiency and decrease the time it takes to engrave an image by changing the orientation of your file. Many users set up their artwork in portrait mode and then rotate the artwork 90 degrees if they are going to print from landscape mode. The portrait mode will engrave in less time if there is a large amount of horizontal text that the laser can automatically skip through. Engraving the same job in landscape mode eliminates the lasers ability to skip through white space, resulting in a longer engraving time.

Speed and Power Recommendations

30 Watt - Epilog Zing

	250 DPI RASTER ENGRAVING	400 DPI RASTER ENGRAVING	500 DPI RASTER ENGRAVING	VECTOR CUTTING
	SPEED/POWER	SPEED/POWER	SPEED/POWER	SPEED/POWER/FREQUENCY
Wood Cherry – Alder - Walnut	40/100	50/100	60/100	1/8" (3 mm) – 70/70/500 1/4" (6.4 mm) – 15/100/500 (multiple passes may allow cutting of thicker materials)
Acrylic	100/100	100/80	100/60	1/8" (3 mm) – 15/100/5000 1/4" (6.4 mm) – 5/100/5000 (multiple passes may allow cutting of thicker materials)
Anodized Aluminum	100/80	100/70	100/60	N/A
Brass-Painted	100/80	100/70	100/60	N/A
Marbleized Painted Brass	100/90	100/80	100/70	N/A
Corian Or Avonite	10/100	15/100	20/100	1/8" (3 mm) – 30/100/5000
Delrin Seals	100/100	100/80	100/70	50/50/5000
Glass	15/100	20/100	25/100	N/A
Laserable Plastic	100/80	100/70	100/60	50/30/5000
Leather	100/65	100/55	100/45	1/8" (3 mm) - 50/50/500
Marble	8/100	10/100	15/100	N/A
Mat board	100/85	100/75	100/65	30/80/500
Melamine	40/100	50/100	60/100	N/A
Stainless Steel With Cerdec Coating	8/100	10/100	15/100	N/A
Rubber & Rubber Stamps	5/100	10/100	20/100	12/100/100
Rubber & Rubber Stamps	10/100	20/100	30/100	15/100/100