

## Mac Driver Installation

### Installing the Epilog Mac Driver for the First Time

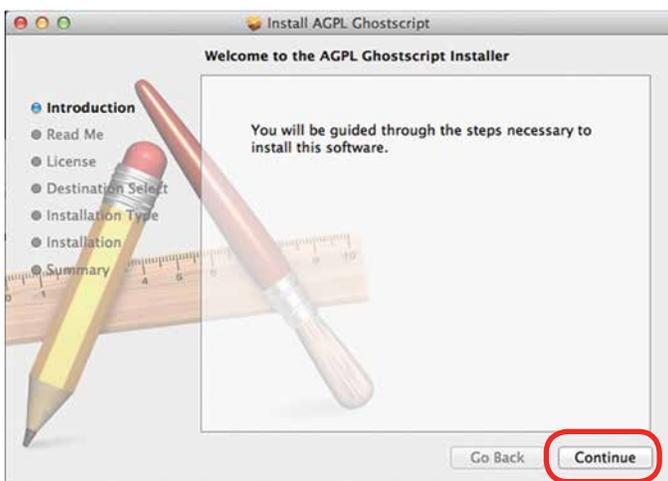


If you already have the Mac Driver installed and just want to add the ability to work on Sierra OS, go to “**Installing the Mac Driver on Sierra OS**” on page 33.

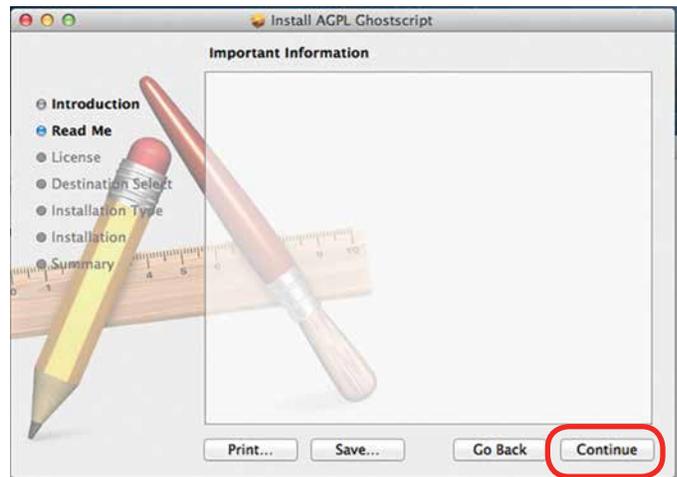
- Go to [epilogfiles.com/epilog-test/EpilogApps.dmg](http://epilogfiles.com/epilog-test/EpilogApps.dmg) and double click to load the file.
- The following screen will appear. First double click the **GhostscriptInstaller.mpkg** file.



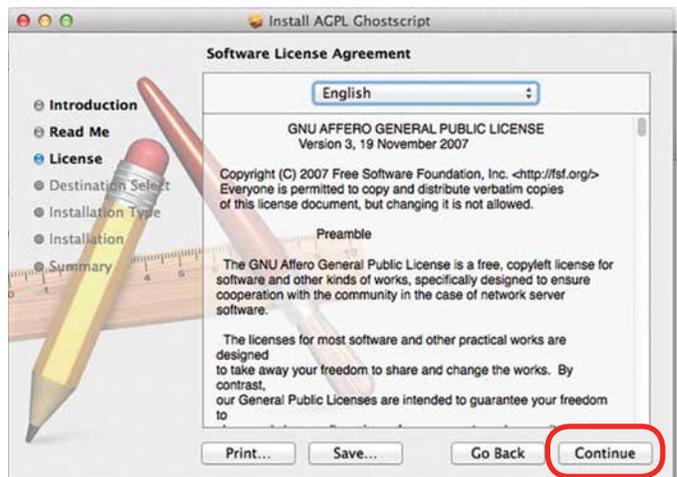
- A welcome screen appears. Click **Continue**.



- Click **Continue**.



- The software license agreement will appear. Click **Continue**.

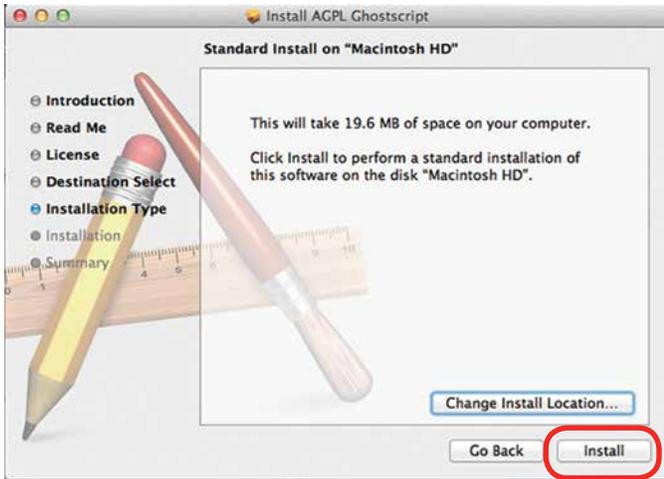


- Choose to **Read License** then click **Agree**.



# SECTION 3: DRIVER INSTALLATION

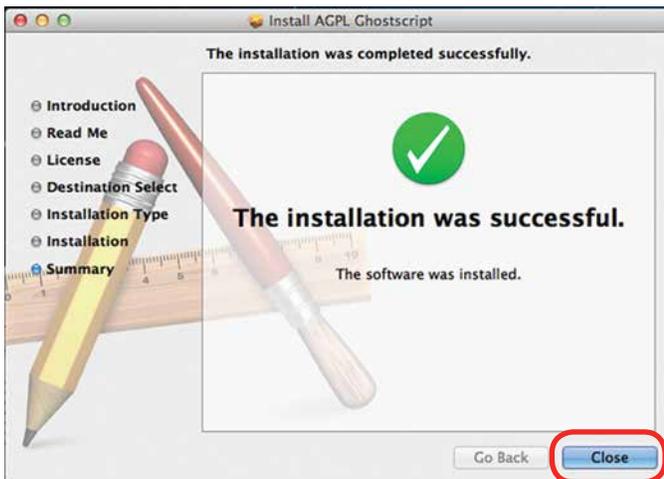
9. Select **Install**.



10. Type in the password **epilog** (lower case) as the password then click **Install Software**.



11. Press **Close** to finish the first part of the install.



12. Go back to the installer and double click **EpilogInstall.mpkg**.



13. The installation process for the EpilogInstaller is the same as for the Ghostscript file. At the end of the installation you will be asked to reboot. **Reboot to complete the driver installation.**

## Installing the Mac Driver on Sierra OS

To install the Mac Driver on Sierra OS there are a few additional steps.

1. Go to **Settings**.

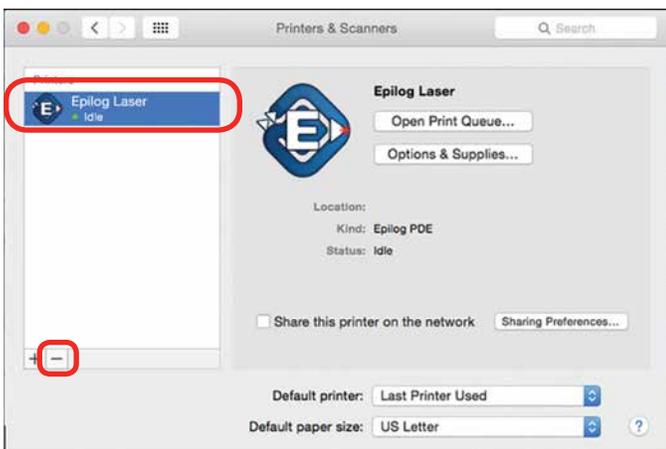


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## 2. Select **Printers and Scanners**.



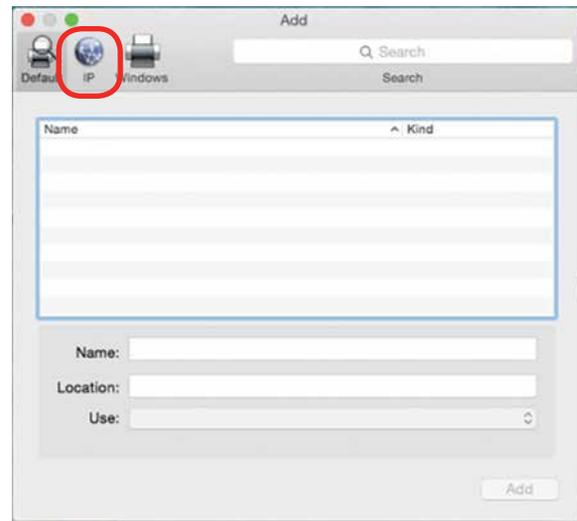
## 3. **Highlight and delete** any existing Epilog drivers by selecting the **minus symbol**.



## 4. Add a new driver by clicking the **plus symbol**.



## 5. Click the **IP icon**.



## 6. Fill out the following information:

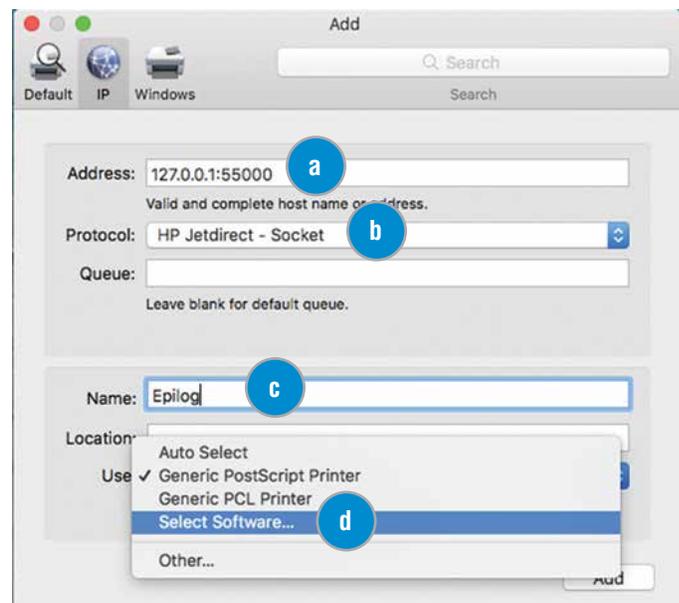
- a Type **127.0.0.1:55000** next to address.

 Important! Notice that a colon separates the 1 and 55000.

- b Set Protocol to **HP Jetdirect - Socket**.

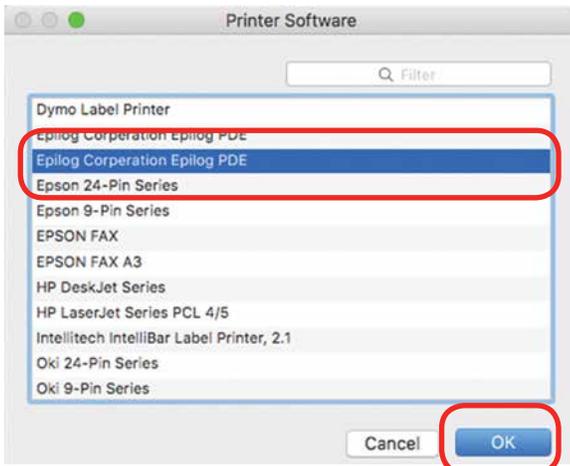
- c Provide a name for the printer. We have named the printer **Epilog**.

- d In the Use drop-down menu, click on **Select Software**.

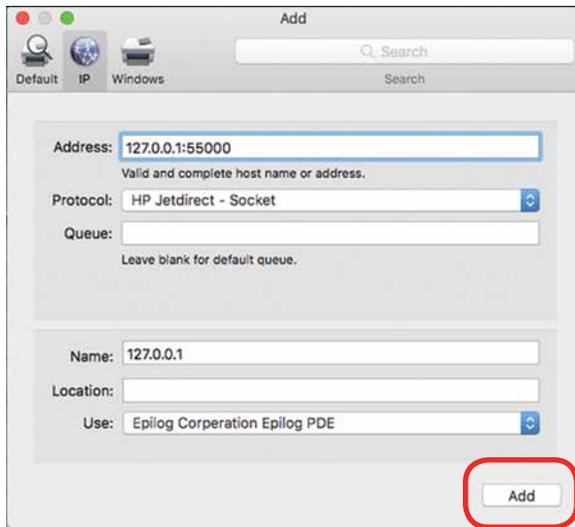


# SECTION 3: DRIVER INSTALLATION

7. Select **Epilog Corporation Epilog PDE**, then click **OK**.



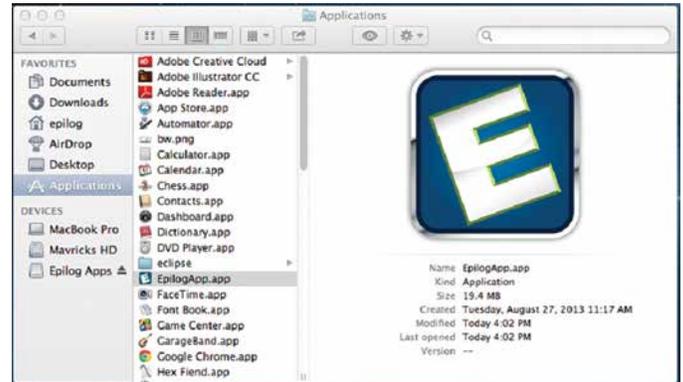
8. Click **Add**.



9. And you're done! The Mac driver has been installed.



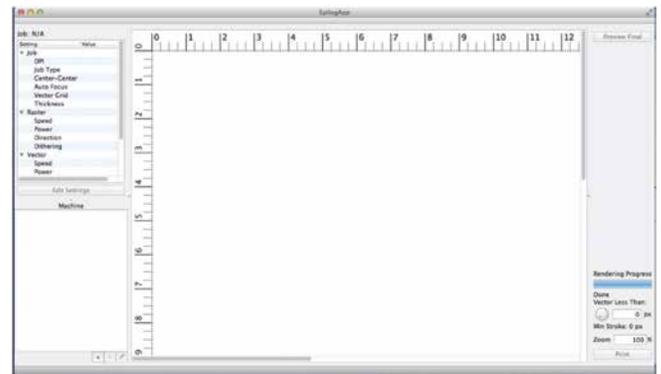
11. Go to the **Finder/Applications**.



12. Finally, drag the **Epilog icon** into the dock.



13. **Click the Epilog icon** and the Epilog viewer will open. At this point, there is nothing in the viewer, but it needs to be open before we print a job.



## Setting up an IP Address:

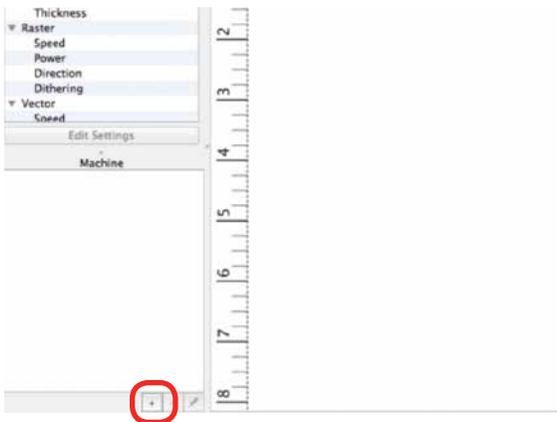
After installing the Epilog print App, we need to establish IP Addresses for both the Fusion and the computer. Setting an IP Address in the Fusion is detailed in Section 2 of the Fusion Owner's Manual.

The Epilog Mac driver can only print using an Ethernet connection. A USB connection will not work.

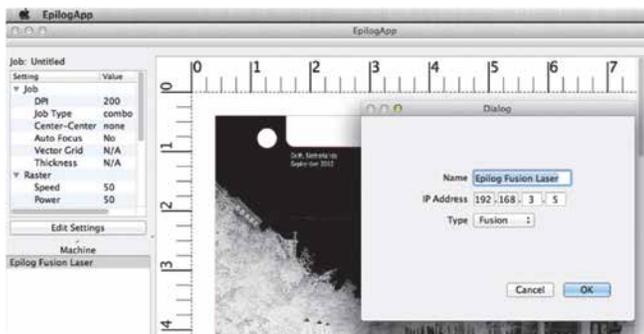
We will first set up an IP Address in the print App that matches the IP Address in your Fusion laser system.

# SECTION 3: DRIVER INSTALLATION

1. To establish an **Ethernet connection**, connect your computer to the Fusion laser system using an Ethernet cable. Turn on your Fusion.
2. From your computer, open the **EpilogApp** and click the **+ button** in the Machine section.



3. Type in a **Name** for your Fusion and the **IP Address** the Epilog print App is going to send/print files to. This IP Address must be the same as the IP Address that is set in your Fusion Laser system.



4. Click **OK**. The Epilog App is now ready to print to IP Address 192.168.3.5.
5. We now want to set up an IP Address for your computer that is different from the IP Address in your Fusion laser system.

From your computer go to System Preferences and then select **Network**.



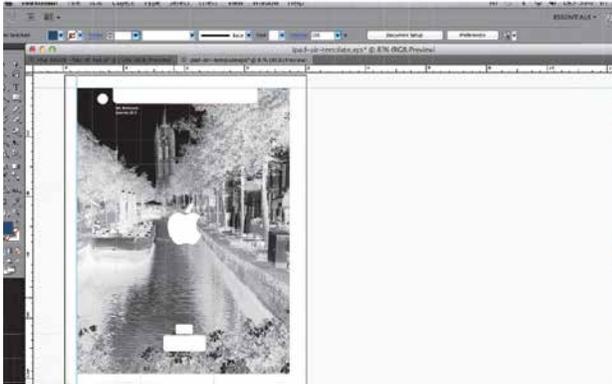
6. If your Fusion laser system is powered on and the Ethernet cable is plugged in your Ethernet should be connected.



7. Select **Manually** for the Configure IPv4 setting, and then type in an IP Address that is different from the IP Address of your Fusion system.
8. Type in the **Subnet Mask as shown**, then click on **Apply**.
9. You should now be able to print a job from your computer to your Fusion laser system.

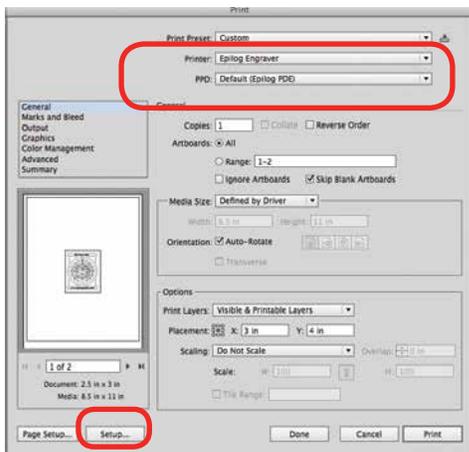
# SECTION 3: DRIVER INSTALLATION

- 10. Now, go back to Illustrator and setup your artwork. The artwork below has been prepared on a 8" x 10.5" page. We're ready to print so go to **File/Print**.

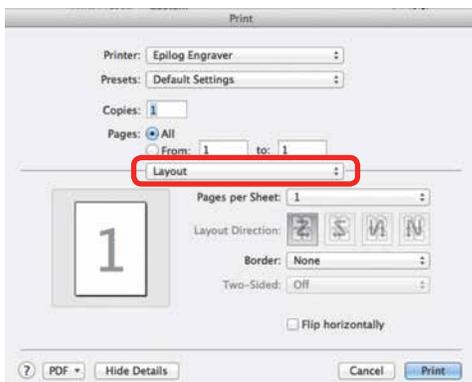


- 11. The standard print window will come up. It will be different depending on which version of Mac OS you are using. Set your **Printer** and **PPD to Epilog**.

- 12. Click on **Printer** to access the laser settings.



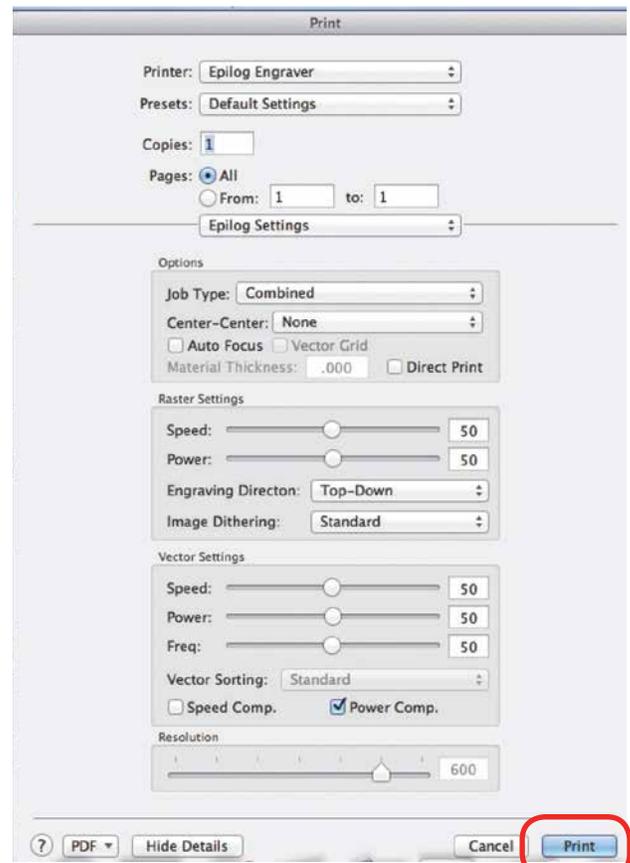
- 13. Click on the Layout dropdown menu.



- 14. Select Epilog Settings



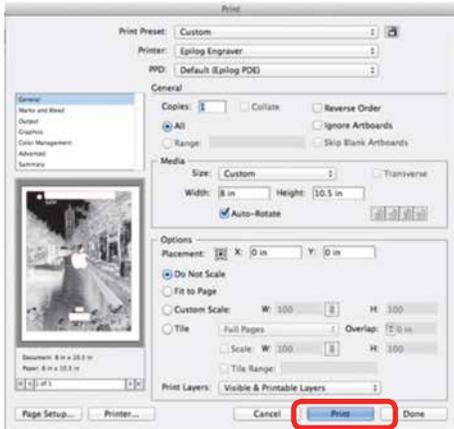
- 15. Set your laser Settings.



- 16. Once your settings have been established, click on **Print**. This will take you back to the Print window.

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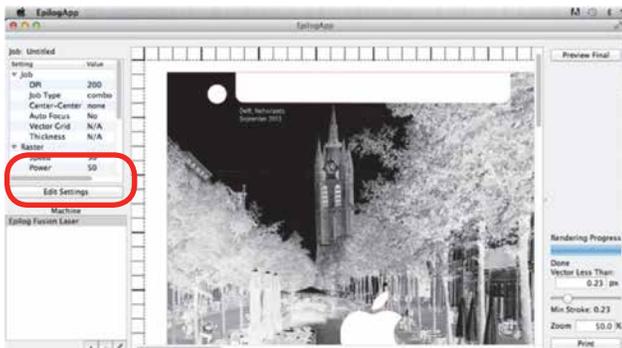
- 17. After establishing your settings, you will return to this window. Click on **Print** again.



- 18. After clicking Print, the driver will transfer the job from the Print window to the Epilog viewer. The Epilog Transfer icon will appear in the Dock. The transfer takes several seconds, but once the transfer icon disappears you can click on the **Epilog icon** to access the viewer.



- 19. Once the Transfer icon disappears, the Viewer icon will bounce up and down and you can click on it to access the Epilog viewer. **It's important to remember that the Epilog viewer icon must be open before Printing.** If it is not open, pause the transfer, open the viewer, and then restart the transfer.
- 20. You are now ready to Print to the Fusion (lower right corner). You can click on **Edit Settings** if you would like to access or change your laser parameters for this job.

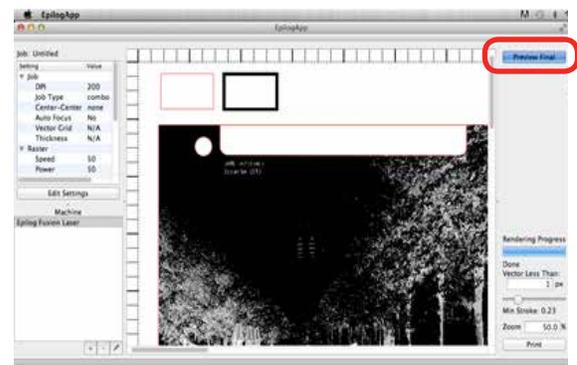


## Vectors

Unlike Windows, the Mac driver can vector many different line weights. However, like Windows, the most predictable way to designate which lines will be vectors is to set the stroke in Illustrator to the smallest line available.

One of the really nice features in the Mac driver is that you can actually see the lines that are vectors in the viewer.

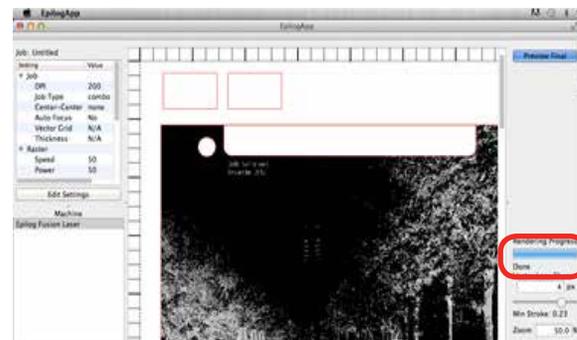
- 1. To see the lines that will vector cut, click on **Preview Final**. The vector cut lines less than 1 px will be shown in red.



In this example, you can see there are red vector lines that will vector. There are red lines that make up the iPad Air template, used for alignment, and another red box above the photograph.

Notice that there is a box in this example with a wide black line, this line has a 3.5 px stroke, and is designated to engrave at this size. We can designate this line to vector cut instead.

- 2. Adjust the Vector Less Than value in the lower right corner. Increasing this value will designate this heavy line as a vector cut line.



3. After increasing the value to 4 px and clicking on Preview Final again, we now have two boxes that will be vector cut.



**Note:** When using this beta version it is a good idea to use px (pixels) to determine stroke thicknesses of your vector cut lines.

This will make it easier to define which vector lines cut and which vector lines engrave in the Epilog Mac Driver App.

# SECTION 6: USING THE EPILOG MAC DRIVER

## Mac Driver Settings

The Mac Driver is a powerful software tool that allows you to engrave and cut directly to your CO2 Fusion Laser from a Mac. Here we demonstrate how to print from Adobe Illustrator, but there are other graphic software programs you can print from to the laser as well.

### 1 Select Printer

Select your Fusion Laser system as your the printer.

### 2 Options

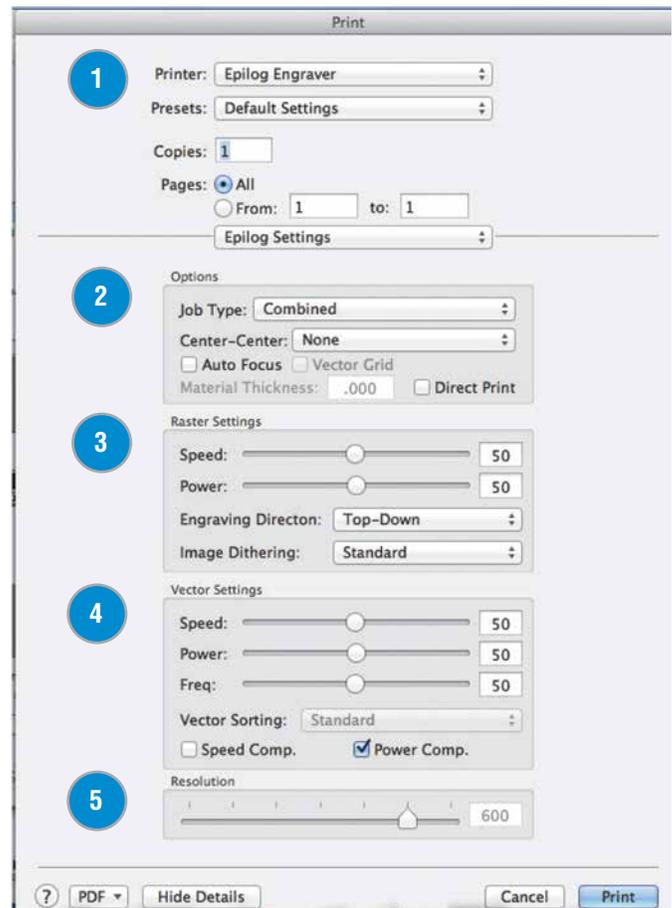
**Job Type:** Choose between the three modes of operation.

- **Raster Mode:** Used for engraving or marking materials. Typical uses would be reproducing clipart, scanned images, photos, text and graphic images.
- **Vector Mode:** Selected when you are only running cut lines or for use with the Red Dot Pointer for previewing the job processing area. For vector mode, a line is recognized as a line to be cut based on line width (stroke).
- **Combined Mode:** Used when you have both engraving and cutting in the same job. The laser will first engrave your artwork, then follow with the vector mode.

**Center-Center:** The Center Engraving Option allows you to define the center of your artwork as the primary reference point (Home Position) of your engraving or cutting. The Center Engraving option has been designed to be used in conjunction with the Jog feature on the Fusion Control Panel. Center engraving differs from standard printing where the upper left corner of the page and the upper left corner of the laser table define your primary reference point. For more information, visit “**Center Engraving**” on page 110 in the manual.

**Auto Focus:** Check this box when you want to use machine’s Auto Focus capabilities. Measure the thickness of the material you are using and input the number into the thickness box. The table will automatically move up or down so that the top of your material is 2” (50.8 mm) from the bottom of the focus lens. If the Auto Focus box is not selected, Auto Focus will be disabled and the table will not move up or down when the job starts.

When the Vector Cutting Table is installed and you want to use Auto Focus, click both the Auto Focus box and the Vector Grid box. This tells the laser system that the Vector Cutting Table is installed and it will automatically calculate the appropriate focal distance based on this information.





The material thickness is still required when using the Vector Cutting Table. If a thickness is not specified the system will Auto Focus to the top of the Vector Cutting Table, not to the top of your material. For a detailed discussion on focusing the laser, visit “**Auto Focus vs. Manual Focus**” on page 97.

**Direct Print:** The direct print check box is for use only when you want to send a job directly to the engraver without first going through the Epilog Viewer.

### 3 Raster Settings

**Speed:** Determines the travel speed of the carriage in Raster mode and is adjustable in 1% increments from 0 to 100%. The slower the speed, the deeper the engraving. Speed settings are heavily dependent on the hardness and the thickness of the material being engraved with harder materials requiring slower speeds for deeper engraving. Slower speed settings will produce greater depth of engraving. Please refer to “**Appendix B: Material Settings**” on page 195 in this manual.

**Power:** Determines the amount of laser energy that is delivered to the piece being cut and is adjustable in 1% increments from 1 to 100%. The higher the power, the deeper the engraving. Please refer to “**Appendix B: Material Settings**” on page 195 in the manual.

**Engraving Direction:** This feature applies to raster engraving only and allows you to engrave your project either from the top-down or the bottom-up direction. In standard top-down engraving there can be a large amount of engraving debris generated, especially on materials such as plastic, wood and rubber. As the debris moves towards the exhaust plenum, some of it collects in the area that has just been engraved. Bottom-up engraving prevents the debris from collecting in the freshly engraved spaces.

**Dithering:** This setting defines how the dot patterns will be engraved in raster images that contain grayscale images, blends, or color. The Dashboard offers six different dithering patterns to enhance your engraving projects. The

default mode is Standard. This mode can be used for all images, including photographs, but some images improve when engraved with other dithering patterns. Dithering is used only for Raster engraving and has no effect on vector cut lines. For more information, go to “**Image Dithering**” on page 100.

### 4 Vector Settings

**Speed:** Determines the travel speed of the carriage in Vector cutting mode and is adjustable in 1% increments from 1 to 100%. The slower the speed, the deeper the cut. Most cutting applications require relatively slow speed settings, and the speed is heavily dependent on the hardness and the thickness of the material being cut. Slower speed settings will also produce better edge quality. High speeds are provided for draft mode only and are not intended for production applications. For more information, visit “**Appendix B: Material Settings**” on page 195.

**Power:** Determines the amount of laser energy that is delivered to the piece being cut and is adjustable in 1% increments from 0 to 100%. The higher the power, the deeper the cut. The amount of power necessary to cut completely through a given material is also heavily dependent on the hardness and the thickness of the material. For more information, visit “**Appendix B: Material Settings**” on page 195.

**Freq:** The Frequency is the number of laser pulses that the laser fires per inch of travel. The frequency is set in the dashboard and can be adjusted from 1 to 100. A lower frequency number will have the effect of less heat because fewer pulses are being used to cut the material. Lower frequency rates are helpful for products like wood where charring is evident at higher frequencies. High frequencies are useful on material like acrylic where a large amount of heat is desirable to melt or flame polish the edges.

**Speed Comp:** Reduces all speed settings by ½. For example, a speed setting of 10 without Speed Comp selected will move twice as fast as a setting of 10 with Speed Comp selected. In essence, Speed Comp provides

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an alternative set of speed parameters that are ½ the speed of the standard settings. Speed Comp mode will most often be used with speed settings below 10 when very slow cutting is desired. Most users will rarely use Speed Comp mode, but it adds additional functionality for unusual or demanding applications.

**Power Comp:** When checked, power compensation reduces the laser output when the laser carriage slows as it moves through a curve. Selecting Power Comp is especially useful for vector cutting jobs that incorporate a large number of curves. This has the effect of producing unparalleled edge quality when cutting curves. Most users find that keeping Power Comp selected is the preferred setting.

### 5 Resolution

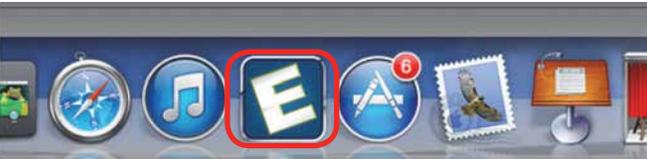
Set your print resolution from 75 to 1200 DPI. For the best engraving results, use a resolution equal to the resolution in the raster images within your project setup. The resolution setting in the print driver will affect the engraving time (there are twice as many engraved lines at 600 DPI as at 300 DPI) and the quality. For a detailed discussion, visit “**Resolution**” on page 83.

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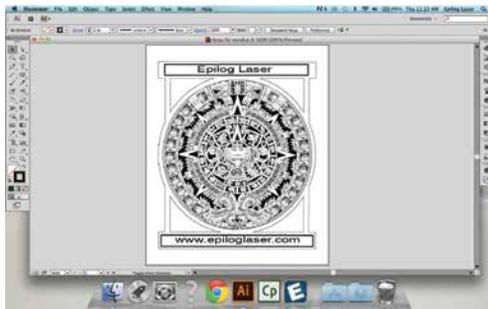
## Project Setup

While the Mac Driver will work with many different graphic software packages, we'll be looking at Adobe Illustrator for this example.

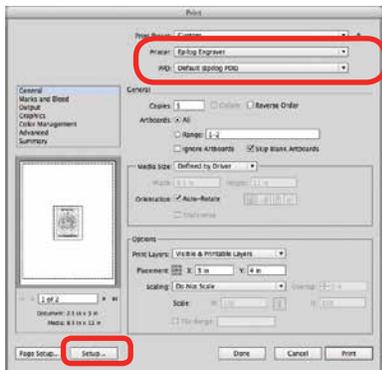
1. Click the Epilog icon to open the Epilog Viewer.



2. In this example, we'll set up an Aztec Calendar engraving and cutting project. We've set up our graphic on our page and are ready to select **File/Print**.



3. The standard Illustrator print window will come up, which will be different depending on which version of Mac OS you are using. Set your **Printer to Epilog Engraver** and **PPD to Default (Epilog PDE)**. Click **Setup** to access the laser settings.

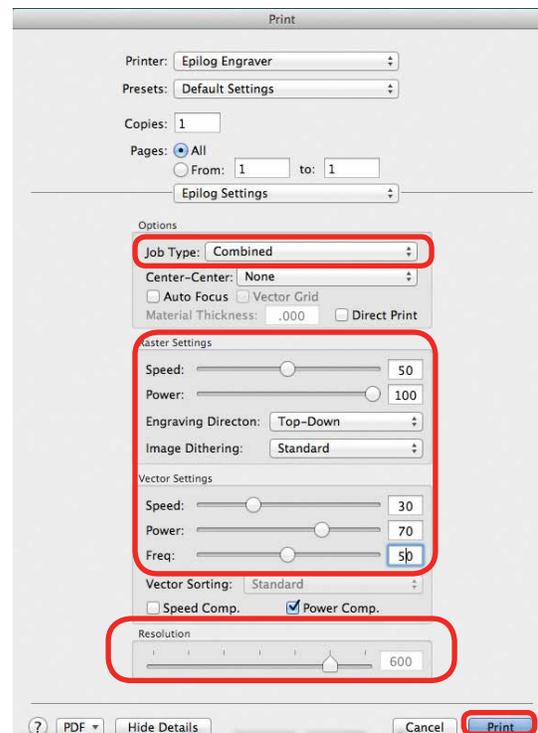


4. Click on the **Layout** drop-down menu and select **Epilog Settings**.



5. Set your laser **Settings**. We've set our Job Type to **Combined** because we'll be both engraving and cutting in this job. For Raster Settings, we've used **50% speed, 100% power**. For Vector Settings, we've used **30% speed, 70% power**. Finally, our resolution has been set to **600 DPI**.

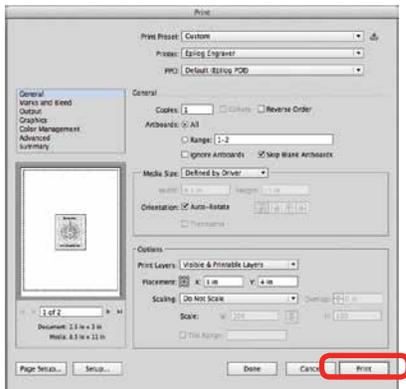
When you have your settings how you'd like them, choose **Print**.



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Vector Cutting Lines

6. You will return to this print window, so click **Print**.



7. The driver will now transfer the job to the Epilog Viewer. The **Epilog Transfer icon** will appear in the Dock. The transfer will take several seconds.



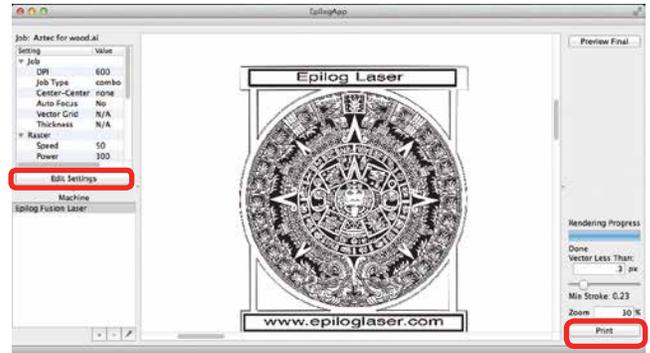
8. Once the Epilog Transfer Icon disappears, the **Epilog Viewer Icon** will bounce up and down and you can **click on the icon** to access the Epilog Viewer.



It's important that the Epilog Viewer is open before printing. If it is not open, pause the transfer in the processing window, open the Epilog Viewer, and restart the transfer.



9. In the Epilog Viewer, click **Edit Settings** if you want to change any print settings, or click **Print** if the job is ready to send to the laser.



## Vector Cutting Lines

1. Unlike Windows, the Mac Driver allows you to set the line width that will be cut in the driver. For this file we have some lines that will be engraved and some that will be cut. The cut lines we set to 0.23 pixels, while the engraved lines we set to 1 pixel width.
2. At the bottom right corner of the screen type **.3** in the Vector Less Than box. This will cut any line that is less than .3 pixels in width and engrave any above that amount.



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3. To see which lines will be cut, click **Preview Final**. In the Epilog Viewer, you can see which lines are vectors and ready to be cut. Click on Preview Final and the vector lines less than 1 px will be shown in red.

