



Glowforge Pro Laser Cutter/Engraver Reference





Glowforge Pro Manual

Preparing your design for the Glowforge

At Do Space, we have a laptop with Inkscape for use with the Glowforge Pro when creating designs, however any vector graphics editor can be used. Any project that includes cut or score lines must be either an SVG or a PDF that contains vectors. Depending on the software used for designing, make sure to save it as a plain SVG. If you are engraving a raster image on your material, a JPG or PNG graphic can be used directly in the Glowforge App.

The printable area on the Glowforge Pro is 19.5" wide by 11" tall

Separate out your cuts, scores, and engraves with different stroke colors. If you are familiar with our Universal laser cutter, we recommend using the same color scheme, though any colors can be used.

For example: **Cut - Red (R:255, B:0, G:0)**

Score (Vector engrave) - Blue (R:0, B:255, G:0)

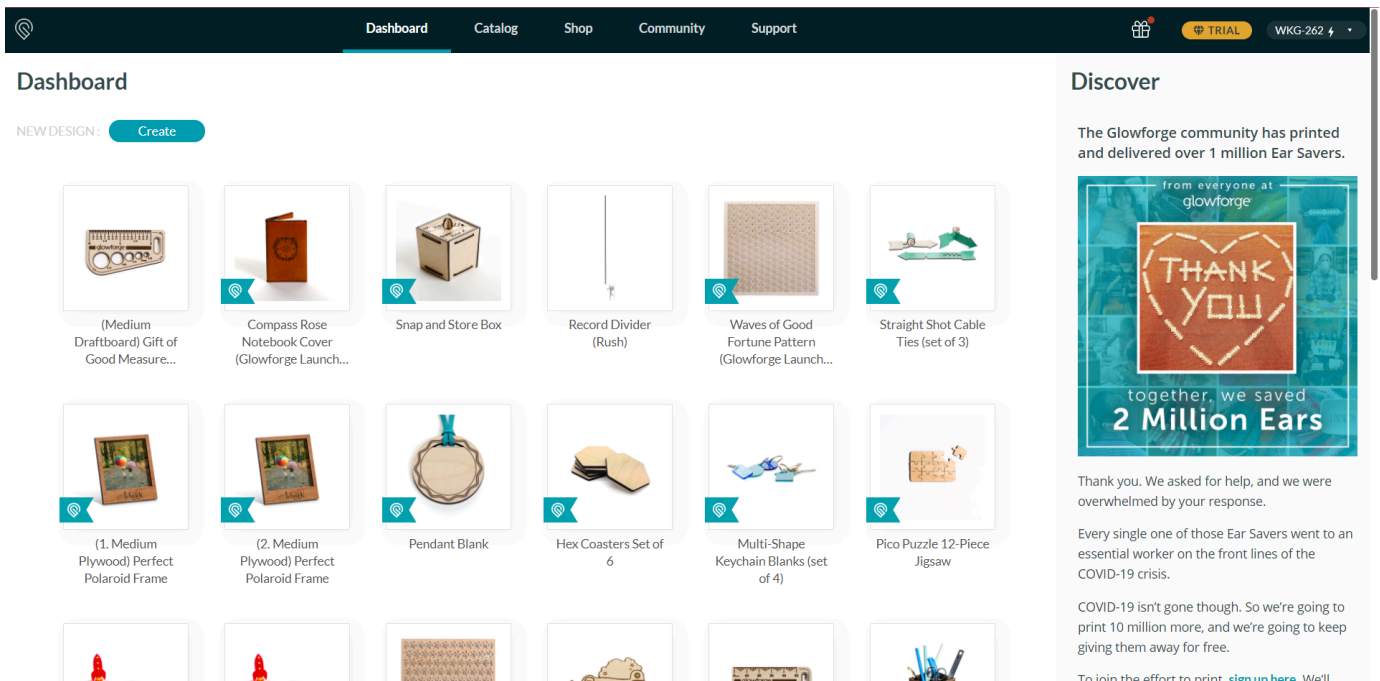
Engrave - Black (R:0, B:0, G:0)

If your design contains any text, be sure to convert it to a path before saving your file. In Inkscape, this option is under the 'Path' and you will select 'Object to Path'. Without this step, your text may not import into the Glowforge App, especially when using a font that is not default.

Using the Glowforge App

Go to app.glowforge.com and log in. If this is your first time using a Glowforge, you should receive an email inviting you to create an account once Do Space staff has added you as a user during the checkout process.

Once logged in, you will be on the Dashboard:



The screenshot shows the Glowforge App Dashboard. At the top, there is a navigation bar with links for Dashboard, Catalog, Shop, Community, and Support. A user profile icon and a 'TRIAL' badge are visible on the right. The main content area is titled 'Dashboard' and features a 'NEW DESIGN: Create' button. Below this, there is a grid of project tiles, each with an image and a title. The tiles include: (Medium Draftboard) Gift of Good Measure..., Compass Rose Notebook Cover (Glowforge Launch..., Snap and Store Box, Record Divider (Rush), Waves of Good Fortune Pattern (Glowforge Launch..., Straight Shot Cable Ties (set of 3), (1. Medium Plywood) Perfect Polaroid Frame, (2. Medium Plywood) Perfect Polaroid Frame, Pendant Blank, Hex Coasters Set of 6, Multi-Shape Keychain Blanks (set of 4), and Pico Puzzle 12-Piece Jigsaw. On the right side, there is a 'Discover' section with a large graphic that says 'THANK YOU' and 'together, we saved 2 Million Ears'. Below the graphic, there is text: 'The Glowforge community has printed and delivered over 1 million Ear Savers. Thank you. We asked for help, and we were overwhelmed by your response. Every single one of those Ear Savers went to an essential worker on the front lines of the COVID-19 crisis. COVID-19 isn't gone though. So we're going to print 10 million more, and we're going to keep giving them away for free. To join the effort to print, [sign up here](#). We'll

The Glowforge App saves all of your projects individually in these tiles. All projects you create or upload here will remain tied to your account. These are not viewable by anyone else.

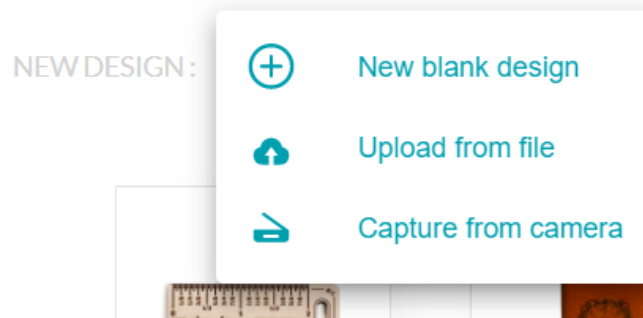
NOTE: Glowforge has an Autosave feature in their interface. If you delete a part or item from your project, it will remain gone when you close it. If you want a part in the process to be ignored but to remain in the file, do not delete it. We'll go over how to skip or ignore parts later on. If you need to make a change and want to keep an original version of your file, there is an option within Glowforge to make a copy.



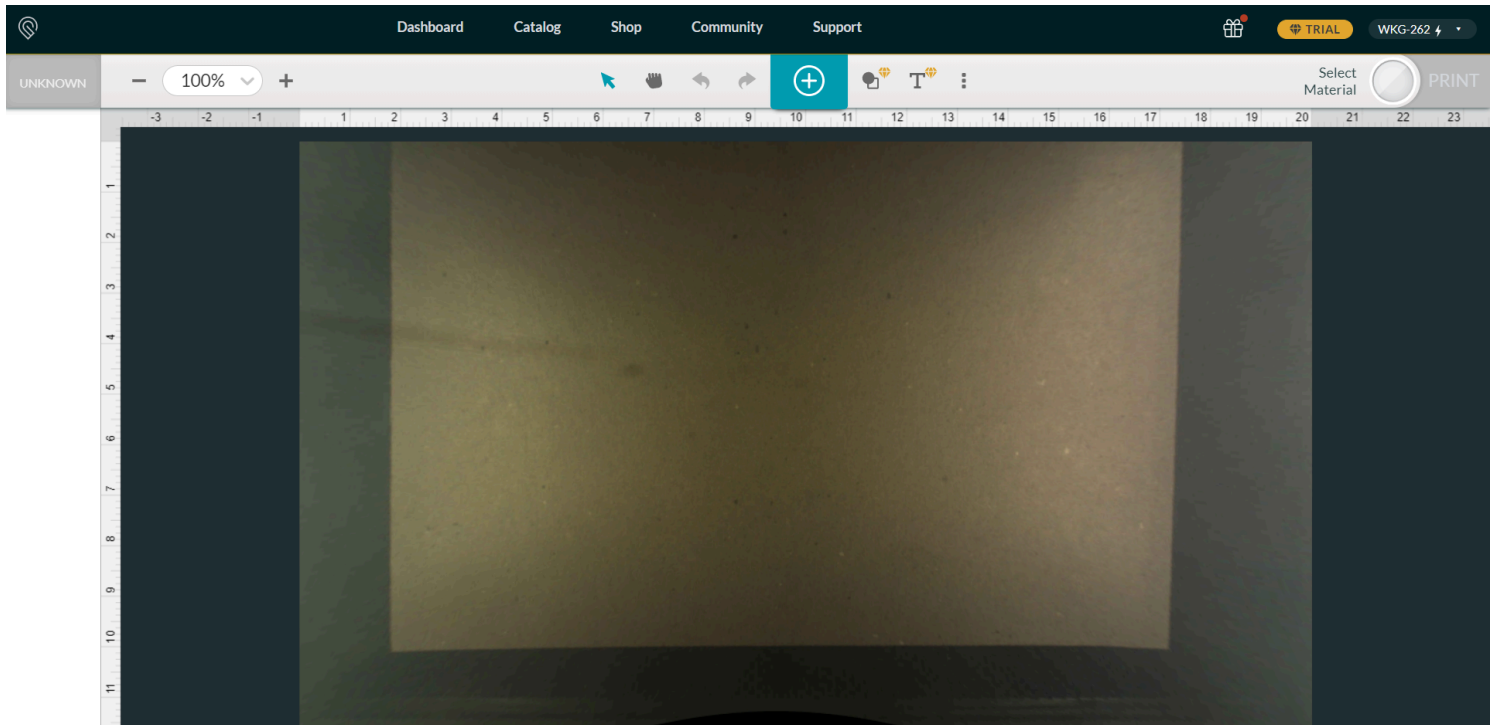
Using the Glowforge App

From the Dashboard, you can start a new blank design, upload an existing design or image, or utilize the Glowforge's onboard camera to capture an image that you've placed on the machine bed to convert into an engraving (such as a child's drawing or loved one's handwriting).

Dashboard



Selecting 'New blank design' will take you to the Glowforge User Interface, or GFUI.

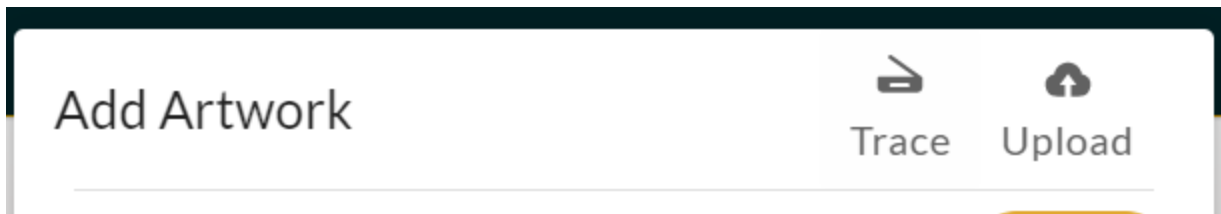
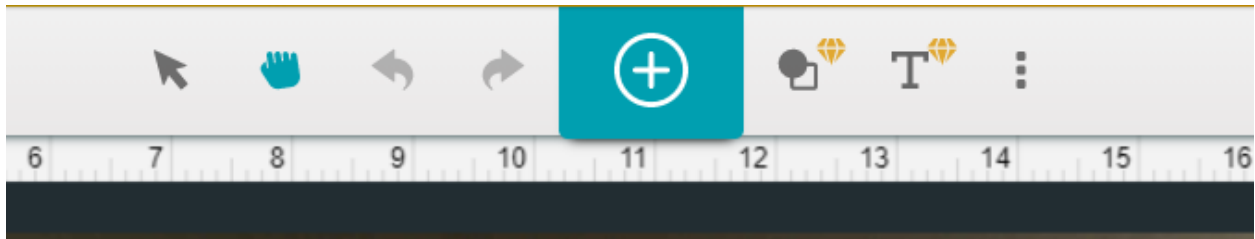




Using the Glowforge App

Glowforge Premium: Glowforge has a Premium version of their User Interface available as a monthly subscription. This adds a large library of commercially-licensed vector graphics and fonts, outline and shape tools, which allow you to create laser ready designs from within the app itself. Any tools that have a gold gem icon next to them are a part of Glowforge Premium. Premium subscriptions are account-based, so members are able to purchase this offering for themselves for use on our Glowforge Pro if they wish to.

If you have a JPG or a PNG you would like to engrave onto your material, you can upload the file by selecting 'Upload from file' from the Dashboard or by clicking the plus symbol in the top-center of the GFUI and selecting 'Upload'.



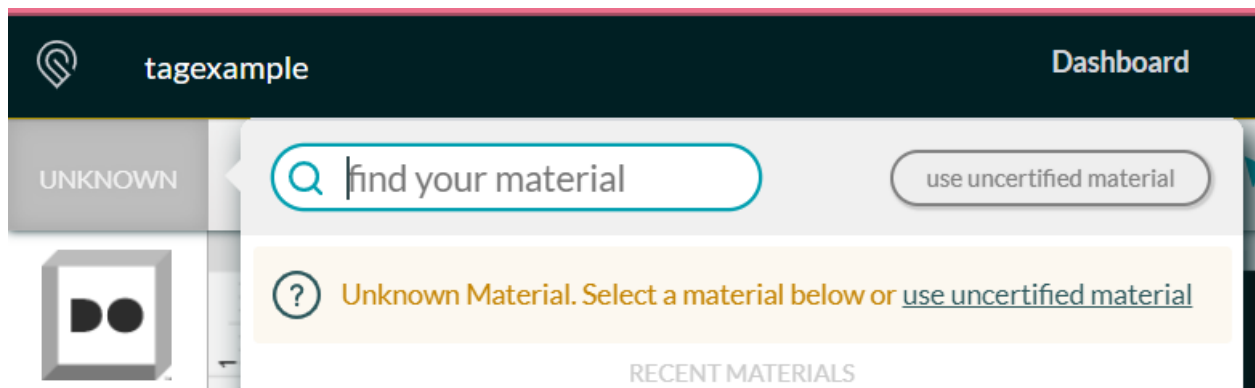
Once your image has been uploaded, you will be able to click and drag to position it where you would like it to be engraved on your material.



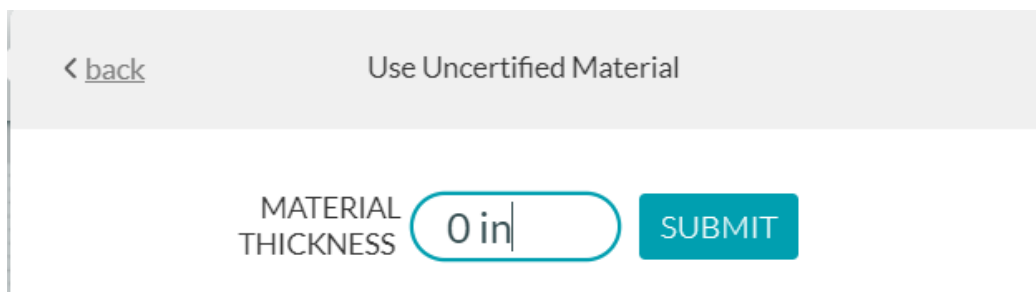
Using the Glowforge App

Proofgrade materials: Glowforge sells their own brand of materials on their website called Proofgrade. These are all materials that have been tested for quality use on the Glowforge machines. Each sheet comes with a QR code that the camera is able to read in order to set the ideal power and speed for that material. These materials can be purchased online on Glowforge's website.

If you are using Proofgrade materials and the camera wasn't able to read the QR code, you can click on the top-left corner of the GFUI where it says 'UNKNOWN' and search for your material.



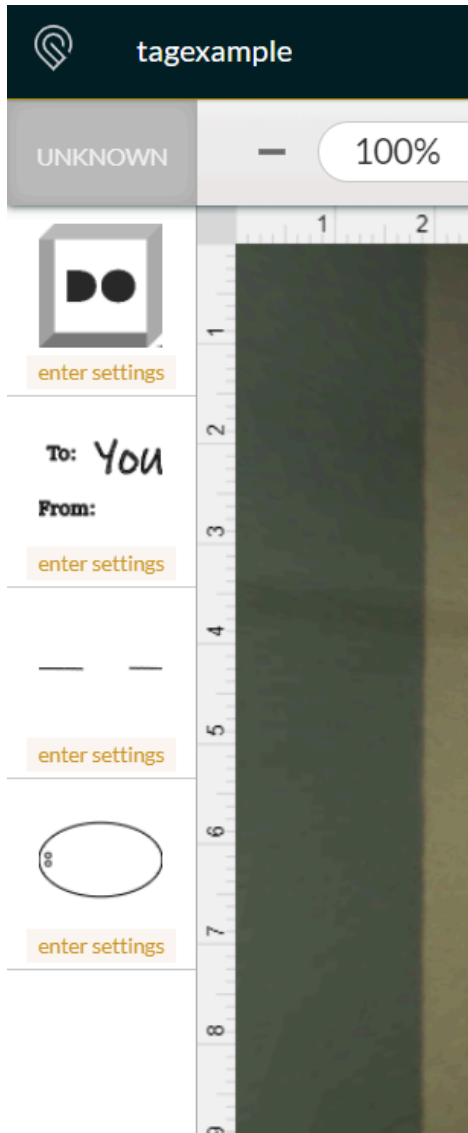
If you're not using Proofgrade materials from Glowforge, you will select 'use uncertified material'



Use the digital calipers to confirm your material thickness and input it here.

Using the Glowforge App

If you have already created a design in a vector graphics program and saved it as an SVG, you can upload that file directly into the GFUI. From your Dashboard, click Create then select 'Upload from file'. Locate your file and click 'Open'. It may take a few moments for Glowforge to process the file, separating the different pieces of your file into steps.



Here you can see that the GFUI has divided out the parts of the design based on the type of object and the stroke color:

The Do Space logo was a raster image. Glowforge has converted it into greyscale from color. This will only have the option to be **engraved** since it is not made of vectors.

This text also comes in as a raster image, so it will also be **engraved**.

These lines are vectors and they will be **scored**. Scores are similar to engraves, but with vectors instead of rasters or bitmaps. You can also think of scores as cuts that don't go all the way through your material.

These vectors will be our **cuts**. In the original file they had a different stroke color than the previous lines, so the GFUI made them separate steps that we can assign independent settings to.

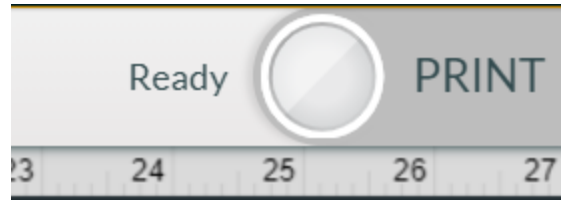
When using Proofgrade materials, the Glowforge App will automatically apply the appropriate settings. You will just need to mark which pieces are getting engraved, scored, or cut. You also have the option to ignore (or skip) any portion of the design without deleting it from the file.



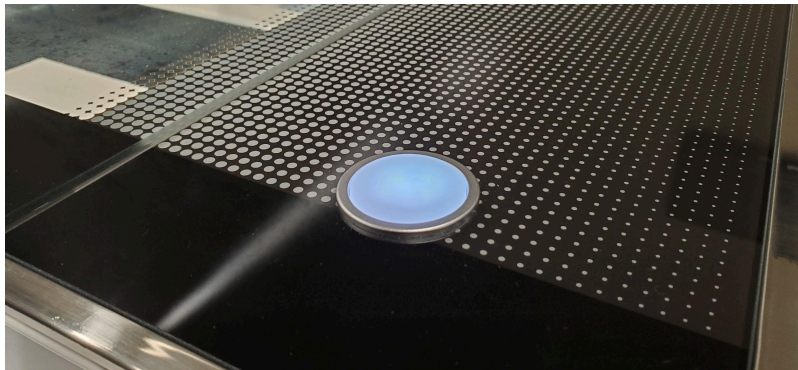
Using the Glowforge App

Once your material has been selected or thickness entered, and all steps specified for engrave, score, cut, or ignore, you are ready to print!

On the right side of the GFUI, you can see the machine status and a button that says 'PRINT'



Once you've clicked 'PRINT', your design will be sent to the Glowforge Pro. This process can take a couple of minutes as the machine utilizes the camera to autofocus to your material and prepare the file. The Glowforge Pro is ready to start when the large button on the top starts glowing teal.



Press the button on the Glowforge Pro and you're ready to go!

There will be a timer on the GFUI that shows how much time is estimated left in your print job. Depending on the length and complexity of your design, the printer may pause intermittently to cool before continuing.

HIDE

HIDE



COOLING DOWN

Keep the lid closed for a moment longer
to minimize smell.



PRINT DONE

You've made something magical and it's
ready right now.

[DISMISS](#)

Once the job has completed, the Glowforge Pro still needs a minute or two to cool and finish venting the smoke from the print bed. The screen will display a message when it's time to open the Glowforge and check out your creation!