Ordering the Front Panel

This is a first and pretty rough draft. Provide feedback by opening issues in GitHub or send email to stdbxmdrtr@gmail.com. These instructions were developed on and for Eagle 6.6.0 running on a Windows 7 PC. If you have a different version of Eagle or a different OS you may need to adapt the instructions to your system.

Once you have finished your design in Eagle and have output the front panel files you are ready to order the laser cut acrylic pieces. The instructions here will walk you through ordering laser cut parts from Pololu, however other laser cutting and engraving services should be able to accomplish the same result. If you use another service you will have to adapt these instructions to the order process of the service you use.

Before you can place an order for your front panel parts you need to request a quote. This is where you upload your design files, tell the service what material you want the parts cut from and explain any other special instructions needed. To make one front panel you are going to order two parts. From Pololu's perspective you are ordering two designs.

On the "New quote" page click on the "Browse…" button. In the dialog that opens navigate to your Eagle Projects folder and select the *mydesign*_Top file. Click Open to upload the file.

Paste the following text into the "Quantity:" window.

> 1 copy of layout defined in the file

Paste the following text into the "Special Instructions:" window.

> StdBx Series100 Front Panel Design (top)
> All lines in this file are cuts all the way through.
> Material: 1/16" Transparent Clear Acrylic
> Scale: mm, component should be 4.1" by 2.2"

Below the Special Instructions window will be a list of all the different materials available. Find the line that looks like the picture below and click the "Use this material" button at the right of the line.

When you click the "Use this material" button the Pololu page updates with a summary of your request. Below the summary is the "Add another design" button. Click it.

Again the page will update. Click the "Browse…" next to My Files: and navigate to your Eagle Projects folder and select the *mydesign*_Bottom file. Click Open to upload the file.

Paste the following text into the "Quantity:" window.

1 copy of layout defined in the file

Paste the following text into the "Special Instructions:" text box.

StdBx Series100 Front Panel Design (bottom)
Material: IPI Laserables Reverse LZR901G 1/16"
2-ply, engraved on opaque side
Scale: inches, component should be 4.1" by 2.2"
Layer 244 (yellow): cut all the way through
layer 245 (magenta): Engraved reverse. Text should read correct when viewed from NOT engraved side. Text stroke width should be 0.015 inches. All closed shapes (layer 245 ONLY) should be filled.
Engrave Depth: .003" (opaque layer to be engraved off leaving engraved area translucent)

Scroll all the way to the bottom of the web page. There you will find another text box and button that looks like this:

Paste the following text into the box and click the "Use this material" button to the right of the box.

IPI Laserables Reverse LZR901G 1/16"

NOTE: START UP ISSUE: Currently Pololu does not stock or even special order this 2-ply material. You can order the material from [Johnson Plastics](#) and have them ship it to Pololu. Hopefully we will be able to get Pololu to stock this material soon.

Again the page will update. The new page will have a summary of both pieces for your design. If you are ordering a back panel at the same time, click the "Add another design" button. If not, check the box next to "I have read and understand the laser cutting capabilities and limitations…". Then click the "I am a new customer" radio button and fill out the form to set up and account. Finally, click the "Submit quote request" button.

In a couple of days you should get a quote email that tells you how much your order will cost and provide a link to the quote materials. Click on the link. Once your quote page opens click on the links for the preview files. These are PDF files that Pololu has interpreted from the design files uploaded. Check these PDFs over carefully. The blue lines are cuts all the way through the material. The black lines and areas are the places that will be engraved. Once you approve the quote Pololu will make the pieces just like the files. If it's wrong on the file and you approve it Pololu will not be responsible.

After you have approved the check files scroll to the bottom of the page and click to place your order. The price goes up the faster you want your parts.

That's it. Your front panel will be shipped to you on the schedule you requested. Of course, you also need to order the parts that will go into your project. For some help ordering the StdBx parts, take a look at the instructions in the file "**Finding Parts for Your StdBx**".