

READ ME FIRST

This is a first and pretty rough draft. Provide feedback by opening issues in GitHub or send email to stdbxmdrtr@gmail.com.

The StdBx instruction files are all task based. That is, they are focused on the steps for getting one thing done. This keeps each set of instructions simpler and no more than a page or two in length.

This document describes things at more of an introductory or overview level. It provides a roadmap leading to the individual instruction files.

All of the instructions and StdBx files were created for and tested using Eagle CAD version 6.6.0 running on a Windows 7 computer. If your operating system or version of Eagle is different, you may have to adjust the instructions some. The instructions also assume that you are somewhat familiar with creating circuit boards using Eagle CAD. If you have little or no experience with Eagle, you might want to start by getting familiar with Eagle before adding StdBx. At a minimum you should already have Eagle installed and have learned to create schematic and board files. There are plenty of tutorials and YouTube videos that teach these Eagle basics.

The first thing to do with StdBx is to install it. The instructions for that are in the file **“Installing StdBx Files into Eagle”**.

Then to start your StdBx design, follow the instructions in the file **“Designing a Series100 Front Panel”**. If instead you are designing a back panel, follow the instructions in **“Designing a Series100 Back Panel”**.

To have your front panel laser cut from acrylic, follow the instructions in **“Ordering the Front Panel”**.

A key part of making StdBx work is getting the right components. For some help getting the parts for your circuit board, front panel, and the enclosure, follow the instructions in **“Finding Parts for Your StdBx”**.

That is really all you need for the basics. The following topics teach you how to do more customization. These tasks will make your front panel more unique, but with that you also take more risk that you might require more than one try to get things right. Plus you will have to use tools beyond Eagle CAD. Using these additional steps may also increase the cost of the front panel. Front panels are not too expensive, around \$15. But if you have to try three times to get one that works that's around \$45 and that *is* expensive. Like anything, practice will help you make fewer mistakes, but if you are concerned with spending or with having your front panel not work right, stick with the steps above. I can't guarantee that sticking to the steps above will always create a perfect front panel on the first try but that is what StdBx is designed for and we'll continue to work to get as close to that as we can.

[Optional and Dangerous] To add a part that is not in the StdBx library, follow the instructions in **“Creating a New Series100 Component”**.

[Optional and Dangerous] Eagle supports only its own fonts (proportional and vector) from within the program; to learn how to create a front panel with other fonts, follow the instructions in **“Using Custom Fonts on Your Front Panel”**.

The instruction files above tell you how to use StdBx. In the **“How It Works”** document I will give a little information on how StdBx creates front panel files from your Eagle design. You don’t need to know how StdBx works to use the basics, but having a deeper understanding might help you move to the “Optional and Dangerous” topics, or might just give you more confidence in StdBx overall.