XChange V1.0 - Pre-Installation Checklist

WARNING!

This device is not a toy. If you are not knowledgeable about 3D printer electronics, please consult an electrical professional for help with installation. Always service your XChange-equipped 3D printer with the power OFF, as its magnets are capable of attracting metallic tools and objects with significant force. The magnetic locking system poses a pinching hazard, and may cause injury if misused. If misused or installed incorrectly, or used without supervision, this device may damage your 3D printer and other electronics. We are not liable for damage arising from the use or misuse of this device.

Before you begin...

XChange is the first system of its kind, and you are one of the first with access to it! While this system was generally designed for compatibility with most 3D printers, there are MANY variables that impact compatibility with different machines and accessories. Before converting your machine to use XChange, it's important that you take your time, think carefully about all the steps, and print or purchase anything you'll need that you don't already have. Please watch any and all instructional videos ahead of time to understand any hurdles you may encounter.

We'll be working to ensure compatibility for as many machines as we can, and this process will be heavily dependent on design input and contributions made by the community. We appreciate your patience during this process, and ask that you refer to **github.com/printermods/xchange** to find helpful documentation, files, and share with the community.

1. ## Plan your build!

   "Measure twice and cut once." Gather all printable files you'll need, and identify any parts you'll need to design, find or purchase. Think about belts, endstops, coordinate changes, firmware adjustments, etc. Then, start by getting your machine printing perfectly with a single tool before moving to assembling the next one. Use our support channels and growing knowledge base for answers to your general installation and usage questions.

   *Find our downloads and knowledge base at **github.com/printermods/xchange***

2. ## Use support resources (and contribute, if you'd like).

   XChange's Kickstarter campaign has granted backers early access to pre-release offerings.

As XChange has not yet been commercially released, it may require adaptation to suit your specific printer model-- adaptation that we may or may not yet have developed or vetted. The feedback and ideas you provide helps us make XChange even better and broadly compatible as we move forward. Be sure to check all documentation, warnings, and requirements before installing XChange.

3. Be careful.

We recommend installing XChange on secondary or non-critical machines until you are completely familiar with its installation, maintenance, and usage. You can avoid costly mistakes by following common sense guidelines such as:

- Print the appropriate master assembly strain relief adapter, and ensure all connections have proper strain relief.
- Print and attach the master assembly safety shroud (never use XChange without this part in place).
- Only service your machine with the power OFF.
- Never place your fingers or any other objects between the magnetic assemblies.
- The magnets are strong enough to grab tools such as screwdriver and hex key bits, so use caution when working in close proximity to them.
- Take care to correctly align tool plates as they are attached to the master assembly.
- Do not drop tool assembly, as pins can break and components may be damaged.
- Take care to leave no stray wires when inserting stripped ends into wire-to-board connectors.
- Additional mechanical reinforcement may be necessary when using tool plate accessories in excess of 600g.
- Do not exceed the rated safe electrical limitations of the PCBs of 2.8A per pin.

4. Have fun!

Perhaps most importantly, we hope XChange sparks new ideas and creative ways for you to use your 3D printer. We'd really love to hear from you, and encourage you to share your successes— and failures— with us. Our team has worked tirelessly to provide you something we hope you'll really love, and sharing those experiences with us is very meaningful to everyone. Reach out to us directly at **support@printermods.com** .

We sincerely thank you for being our backer, and making XChange possible. <3