sparkfun

Shapeoko Deluxe Kit

TOL-13718 ROHS ✔ 🎋



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Description: This is the Shapeoko Deluxe Kit, a desktop, 3-axis CNC Machine kit that allows you to create your 2D and 3D designs out of non-ferrous metals, hardwoods, and plastics. This special SparkFun Edition of the Shapeoko Kit includes everything from the base frame and hardware to the motors and SparkFun Stepoko controller. This is an entry-level CNC machine designed for hobbyists, artists, and fabricators! The only thing that is not included is a trim router which can be purchased from most hardware stores or online retailers.

The included SparkFun Stepoko is an Arduino compatible, 3-axis control solution that runs grbl software and is able to connect to your computer to accept stepper motor commands. The Stepoko's design and firmware are completely open source and it works with an open source Java based cross platform G-Code sending application to translate commands. Don't worry, we've designed the Stepoko to be as simple to use as possible. With it being pre-programmed grbl software and the installation of the Stepoko consisting of just plugging the stepper motors in, connecting it to power and to your computer you'll be amazed by just how simple this board really is! To top it off, we've designed the SparkFun Stepoko to fit and be secured inside of a custom Big Red Box for an effective enclosure option that allows access to all of the boards connectors and a spot for the massive heatsink to rest in.

The Shapeoko 3 has a cutting area of $425 \, \text{mm} \times 425 \, \text{mm} \times 75 \, \text{mm}$ (16" x 16" x 3") and an overall footprint of $725 \, \text{mm} \times 600 \, \text{mm}$ (28.5" x 23.6"). We don't currently carry a router to go on your machine. The folks at Shapeoko recommend the Dewalt DW611 or the Porter Cable 450 to use with the machine. We ended up using a cheap Harbor Freight one that we 3D printed an adapter for to make it fit. Don't forget you can put whatever you want on the end, whether that's a laser, 3D print extrusion head, or a marker. Get creative!

Note: The power cable included in this kit is designed for the United States National Plug Standard. If you are purchasing this kit outside the US you will need to use or buy a power cable that fits your country's standard.

Includes:

- 1x SparkFun Stepoko
- 1x Shapeoko 3 CNC Machine Mechanical Kit
- 4x Stepper Motor 125 oz.in (200 steps/rev)
- 1x Power Supply 24V 5A
- 1x Power Cable 7A IEC C13
- 1x USB Cable A to B 6 Foot
- 1x Toggle Switch
- 1x Big Red Box Enclosure (Milled)

Features:

- Footprint: 725mm x 600mm (28.5" x 23.6")
- Cutting Area: 425mm x 425 mm x 75mm (16" x 16" x 3")
- Motion System: GT2 Belting, 2mm pitch with NEMA23 Motors
- Frame: SparkFun Red 10ga Formed Steel Plates with Aluminum Extrusions
- Recommended Spindle: Dewalt DW611 or Porter Cable 450
- · Weight ~55lbs.