

TIP 111 — Learn How To Build a DIY CNC Controller/David Wagoner

About TinyCNC-II: Open Source 4-Axis Controller

David Wagoner recently wrote us about a project he has been working on for over 20 years (off and on and in various versions). It is CNC hardware and software that he has decided to open source. He created his TinyCNC-II hardware and software to help promote interest in machining and electronics for hobby users, schools, and similar interested parties.

He tells us he has been a happy owner of Sherline equipment since 1998. In using the equipment over the past several decades, he has created a small stand-alone 4-axis controller (or remotely controlled via LinuxCNC) that helps to augment his machining hobby.

David has put a lot of work and time into his CNC 4-axis controller. We see this as a very good DIY project for building your own CNC controller, and his instructions are very good. As an example, his instructions describe sensor requirements for spindle position detection to perform threading on the lathe.

David uses conversational programming because it is easier for a hobby user and is less intimidating to use than g-code. G-code, however, is still the underlying code for his controller.

Build a DIY CNC Controller Information

Below is a screen shot of David's website home page. The TinyCNC-II Project that he created provides interested parties with all the information necessary to acquire parts, and to build and operate the unit.

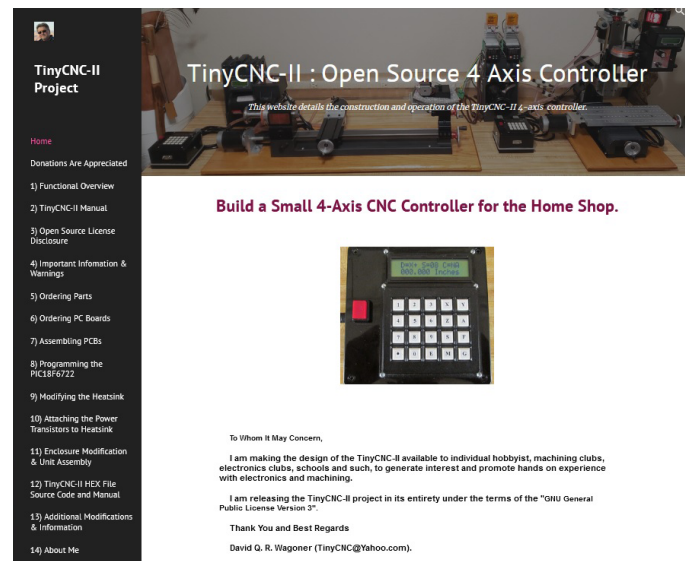


FIGURE 1—David's TinyCNC-II home web page. This website details the construction and operation of the TinyCNC-II 4-axis controller.

You can learn more about how to build a DIY CNC controller by visiting the TinyCNC-II project website at: www.dqrwagoner.com