

Shapeoko 5 Pro

Applies to:

Warthog Controller and Carbide Motion >=5

Your new Spindle Kit is fully programmed for automatic control but also has a “Manual Override” switch which lets you run your spindle in manual mode via the VFD’s keypad controls.

If you’d like to run your spindle in manual mode, flip the “Manual Override” switch up or “1” to enable VFD Keypad controls. Then use the Run/Stop and Potentiometer dial on the front of your VFD to run your motor.

If you’d like to automatically control your spindle via g-code and the Shapeoko’s controller, perform the following:

Step 1: Install the included Pigtail. Using a 30/64” drill bit, modify the box to allow for the connector.

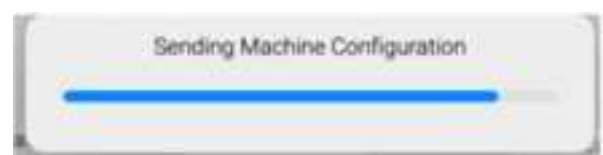
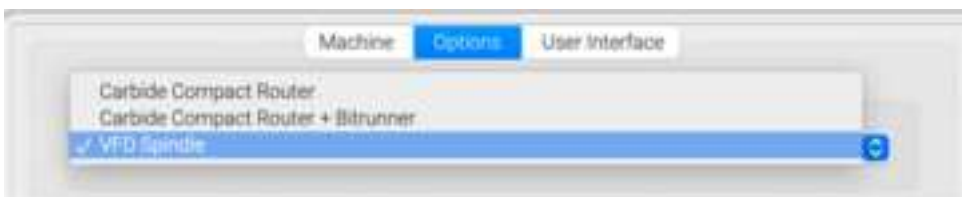
If warranty is important, delay this until your 1 year with Carbide3d expires.

Connect the wires with the black wire over the lower left pin of the ICSP pins.



Step 2: Setup Software: Your VFD has come preprogrammed to accept a PWM signal between 0 and 5 volts. This matches the signal your Warthog Controller sends out, and configure your software for VFD Spindle and Bit Runner disabled. If Bit Runner is ghosted but enabled (checked), reconfigure it to router, disable it, then retry using VFD Spindle.

From within Carbide Motion >=v5 navigate to the Settings->Options and change the Spindle to “VFD Spindle”. Hit OK at the bottom and confirm sending configuration to your machine.



That’s it... just remember to properly configure your RPM’s when working within Carbide Create or other CAD software.

If you have any questions, reach out to us at support@pwnnc.com



Carbide 3D

Quick Start Guide

We've poured all our knowledge and experience into this high-quality product capable of being used with many different brands and models of CNC machines. Installation is very easy but it does help to identify each of the parts of our kit so you can understand the terminology in documentation.



Our enclosed vfd (left) is the heart of our spindle kit and allows you to control the motor (right).

** Your motor may be different than pictured here, however all enclosed VFD's will look like this. (Water Cooled Shown)*



The Spindle cable (left) links the above motor (upper-right) to the VFD (upper-left).

The Control cable (right) links the VFD (upper-left) to your CNC's controller.



** Left (H2O Shown).*



We include the most common collet sizes and a collet nut (left). These snap together and mount onto the end of shaft of the motor (upper-right) using the included wrenches (right).

** Collets, Nuts and Wrenches - sizes may vary.*



Lastly you'll find a power cable (left) which is either 110v or 220v depending on your order.

**220v Shown*

Immediate Testing...

If you'd like to test your spindle kit prior to installation. Connect the Power and Spindle cables to your enclosed VFD and plug the other end of the Spindle cable into your motor (do not install collet or nut for this test). Flip ON the VFD's power switch, flip the "Manual Override" switch to Manual, then press the green Run button on the front. Lastly turn the dial to adjust the spindle RPMs. Press the red Stop/Reset button to stop the test.