Controller Guide

Applies to:

Sienci Labs Super LongBoard Controllers

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.

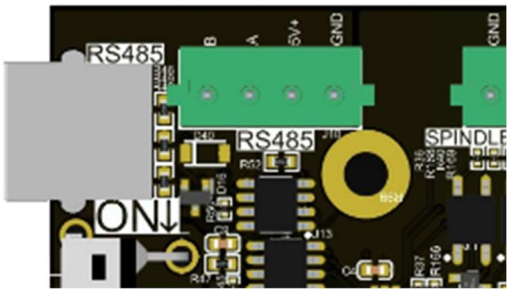
If you’d like to run your spindle in manual mode, flip the “Manual Override” switch up or “1” to enable VFD Keypad controls. Then use the Run/Stop and Potentiometer dial on the front of your VFD to run your motor.

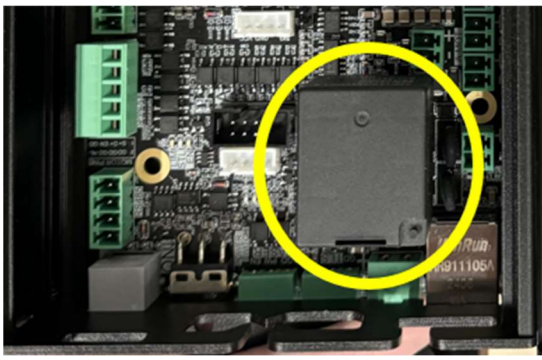
SIENCI LABS
DESKTOP CNC MILLING

We’ve had success using Modbus control opposed to PWM. This would be in the form of the 2-pin connector on your VFD labeled “Modbus” directly to your Super LongBoard. If you’d like to automatically control your spindle via g-code and your CNC machines’ Super LongBoard controller, you’ll need to perform several steps of configuration

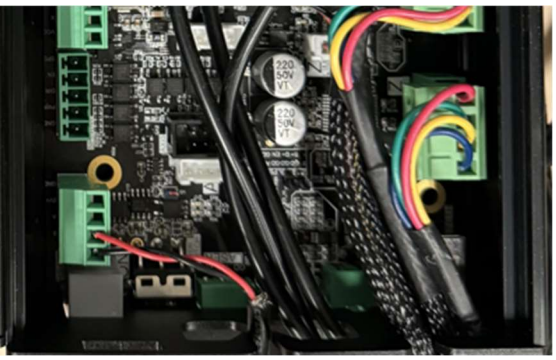
Connect the Red wired ferrule connector the A terminal connector and the black to the B

Within G-Sender:
$16 = all off
$31=6000 Minimum RPMs
$340 = 0
$374 = 19200
$375 = 50
$392 = 6
$395=MODVFD
$462=40960
$463=40961
$464=36864
$465=1
$466=2
$467=6
$468=25
$476 = 1





Relay on SLB-EXT
$340 = 5



No Relay on SLB
$340 = 0

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

Quick Start Guide

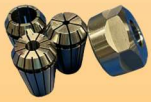
We've poured all our knowledge and experience into this high-quality product capable of being used with many different brands and models of CNC machines. Installation is very easy but it does help to identify each of the parts of our kit so you can understand the terminology in documentation.

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.

** The spindle cable may have different end than pictured to match your configuration (H20 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.