

For configuring Mach follow these steps:

1. Go to Config / Ports&Pins / Motor Outputs. Enable the spindle and select the port and pins you wired for step and direction.

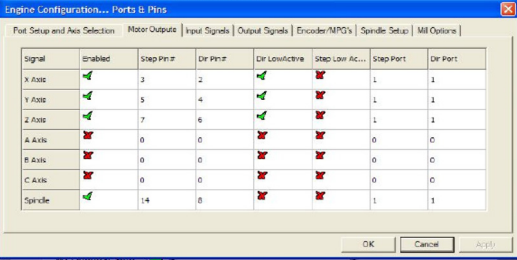
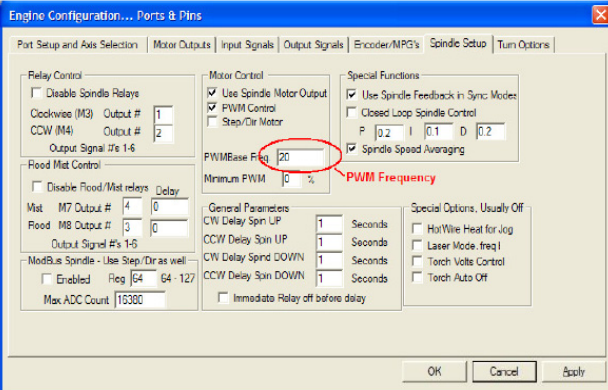


Fig. 2. Ports&Pins configuration screenshot

2. Go to Config / Ports&Pins / Spindle Setup. In the motor control box, check Use Spindle Motor Output and Step/Dir Motor. Under Pulley Ratios set the pulley ratios of the machine.



Go to Config / Motor Tuning / Spindle. On Steps per unit put 1,000, set velocity to maximum. For Acceleration, choose the acceleration that you feel comfortable with. Start slow, increase acceleration as you test your system. Under Step Pulse length, use a number from 3 to 5, but start with 3. This number is directly proportional to the final voltage you will get in the analog output. Use this number and the fine tuning pot to adjust the voltage you want to get at max speed.

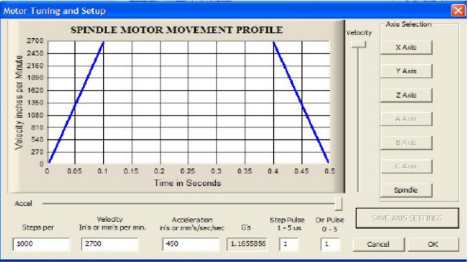
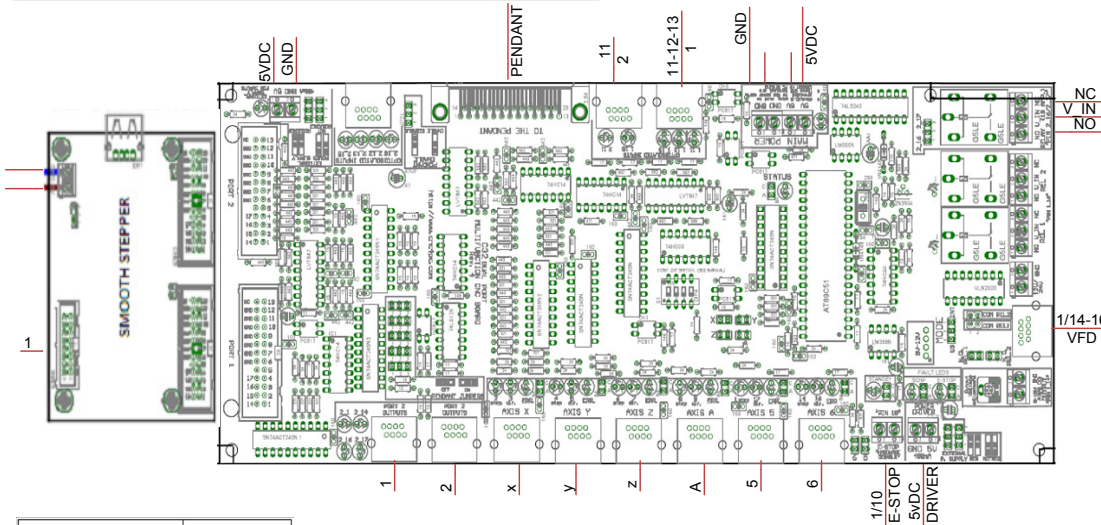
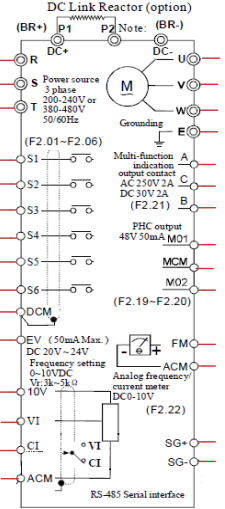


Fig. 3. Motor Tuning and Setup screenshot



RJ45 for VFD	
RJ45 PIN	Function
1	Analog GND
2	Analog Output
3	Not Used
4	REL 1 Normally Open Contact
5	Ext. GND
6	REL 2 Normally Open Contact
7	Ext. 12VDC or 24VDC
8	Relay Common

US MODE (INT)			
PIN	RELAYS	RELAYS	OPERATION
1 14	REL 1	REL 2	
PWM 1	OFF	ON	Spindle ON CCW
PWM 0	ON	OFF	Spindle ON CW
0	1	OFF	Spindle Off
0	0	OFF	Spindle Off

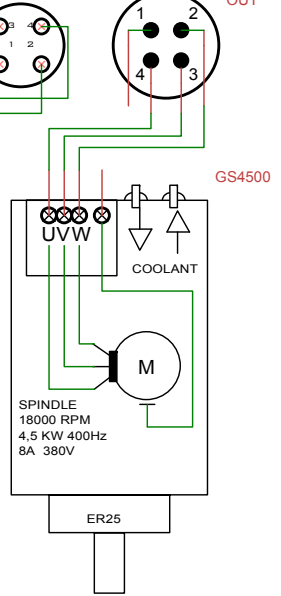
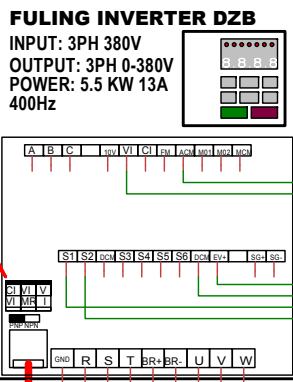
PANEL

General

Inverter

IPD

ANALOG INPUT SELECT SWITCH VI



Title Spindle ON/OFF - CW/CCW	
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Revision 1.0	Sheets 3