

## System 4B Configuration for use with Mach3

Verify that no external device driver plug-ins are loaded (such as the ncPOD)

Assumptions:

10 pitch screw, single start.

SV-500 servo drivers set to 1X

4-axis setup, rotary table has 5 degree per rev drive.

10 TPI screw: 56457.09 steps per inch 4X, 14114.2725 steps per inch 1X

Motor tuning Inch:

Axis	Steps/in, Steps/deg	Velocity in/min	Acceleration in/sec/sec
X	14114.2725	90	14
Y	14114.2725	90	14
Z	14114.2725	90	14
A	282.28545	4000	640

Motor tuning mm:

Axis	Steps/mm Steps/deg	Velocity mm/min	Acceleration mm/sec/sec
X	555.68002	2286	355.6
Y	555.68002	2286	355.6
Z	555.68002	2286	355.6
A	282.28545	4000	640

Motor Ports and Pins:

Axis	Step Pin	Dir Pin	Step Port	Dir Port
X	3	2	1	1
Y	5	4	1	1
Z	7	6	1	1
A	9	8	1	1

Ports and Pins, Input Signals (assumes no homing):

Input Signal	Active	Port number	Pin Number	Active Low
X++	Y	1	12	Y
X--	Y	1	12	Y
X home	N	1	0	N
Y++	Y	1	12	Y
Y--	Y	1	12	Y
Y home	N	1	0	N
Z++	Y	1	12	Y
Z--	Y	1	12	Y
Z home	N	1	0	N
A++	Y	1	0	N