

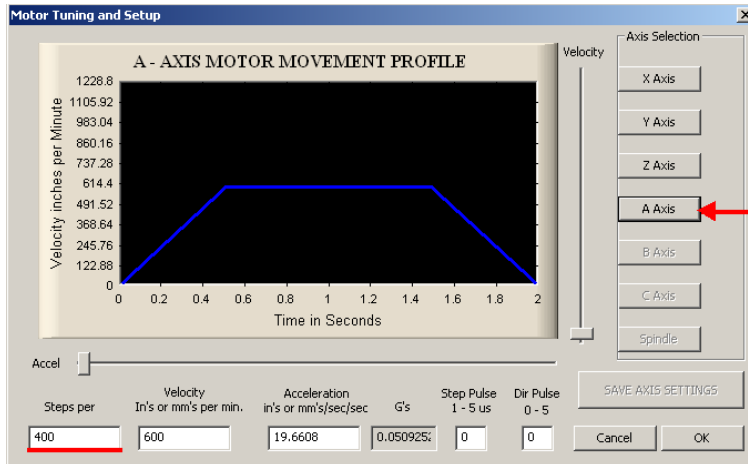
A AXIS - ROTARY TABLE SETUP

MACH CONFIGURATION

First make sure you have the pins assigned for you're A axis, example shown below.

Engine Configuration... Ports & Pins							
Port Setup and Axis Selection							
Signal	Enabled	Step Pin#	Dir Pin#	Dir LowActive	Step Low Ac...	Step Port	Dir Port
X Axis	✓	2	3	✓	✓	1	1
Y Axis	✓	4	5	✓	✓	1	1
Z Axis	✓	6	7	✓	✓	1	1
A Axis	✓	8	9	✓	✓	1	1
B Axis	✗	0	0	✗	✗	0	0
C Axis	✗	0	0	✗	✗	0	0
Spindle	✗	0	0	✗	✗	0	0

Then do the motor tuning for your rotary table, example shown below.

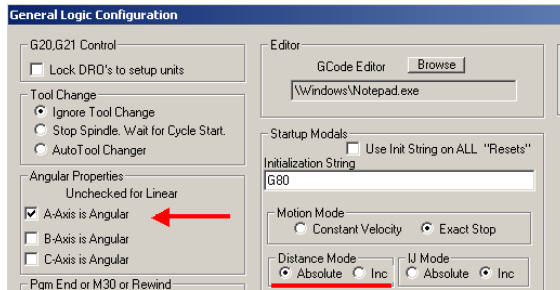


Calculate the steps per unit for your table.

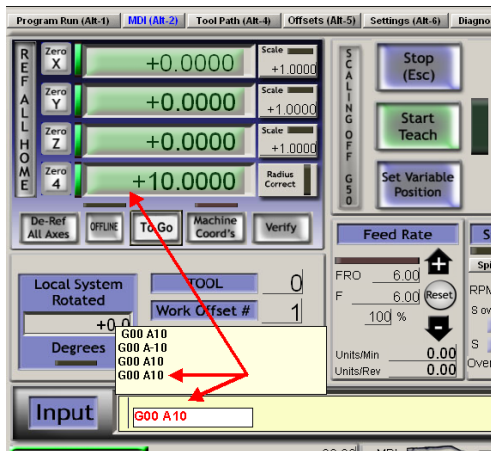
- For my Sherline Table the gear ratio is 72:1 (so it takes 72 revolutions of the handle to make the table go 360 degrees).
- One revolution of a 1.8 degree stepper = 200 steps
- 200 steps per rev of stepper X 72 rev for 360 degrees of table = 14400 Steps required for 360 degrees of table movement
- 14400 steps for one complete table revolution / 360 degrees = 40 steps per degree
- if microstepping (mine is 10u steps) then 40 steps per degree X 10 = **400 STEPS / DEGREE**

That is the value for “Steps per” as shown above. You will need find the velocity and acceleration settings which are suitable for your particular table.

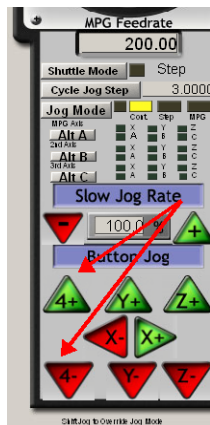
Now go to the general configuration page and set you axis for angular. Additionally, you need to decide if you want the move the table absolute or incremental. That is your choice.



Now go do a movement command using the MDI line, in this case G00 A10 where **A** value is the number of degrees you want to move, and as shown below, the display shows 10 degrees. Remember that it was absolute, so the table moved to the 10 degree position from 0 degrees.



Of course you can jog the table around using the fly out which is activated via the keyboard "Tab" key.



Hope this helps, RICH