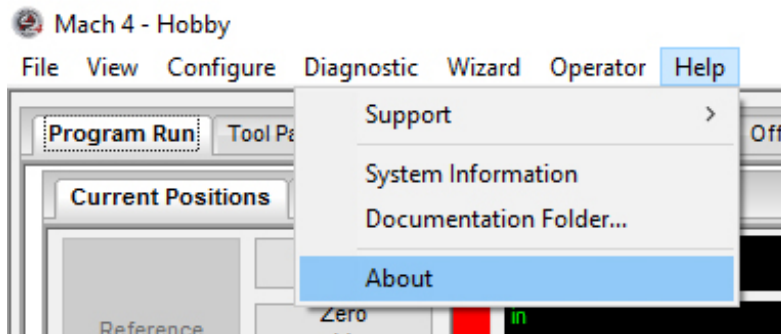


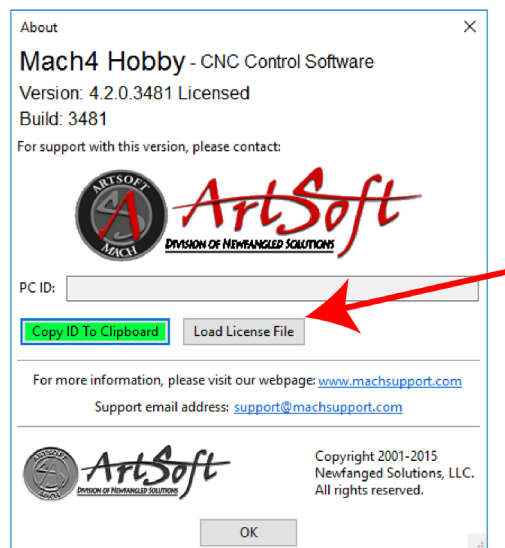
Mach4 Setup

- Install Mach4
- Install License
- Import Profile
- Assign Pins

Installing the Mach4 license



Help > About



Navigate to your license file

Mach4 Setup

Plugins

You will need to install a plugin with your UC100 or Ethernet Smooth Stepper.

UC100 plugin and manual

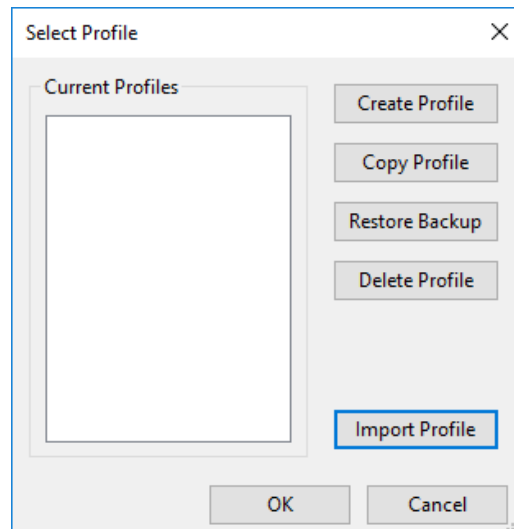
<http://cncdrive.com/UC100.html>

Ethernet Smooth Stepper plugin and manual

<https://warp9td.com/index.php/gettingstarted/setting-up-the-smoothstepper-and-mach4>

Importing a Profile

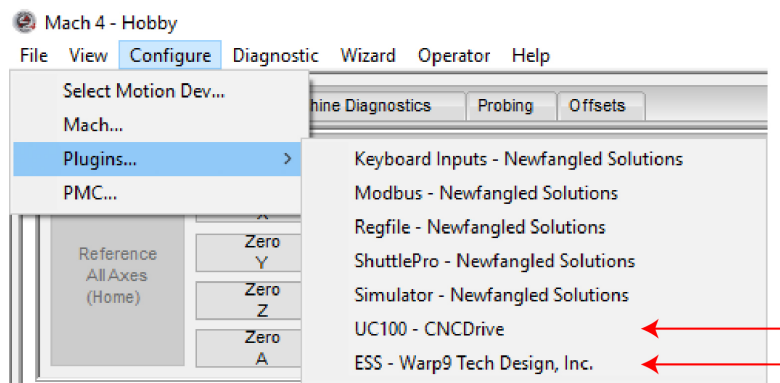
If you have bought a machine from us, we have a Mach4 profile for you to get started with. Please contact us if you have not received such profile.



Mach4 Setup

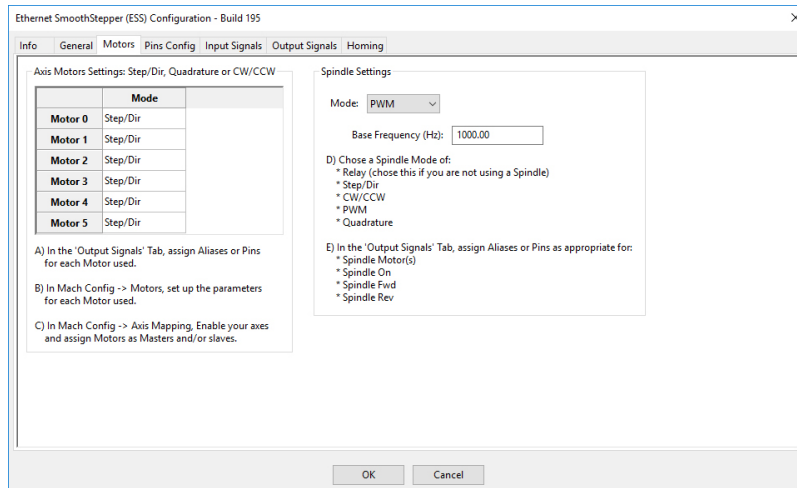
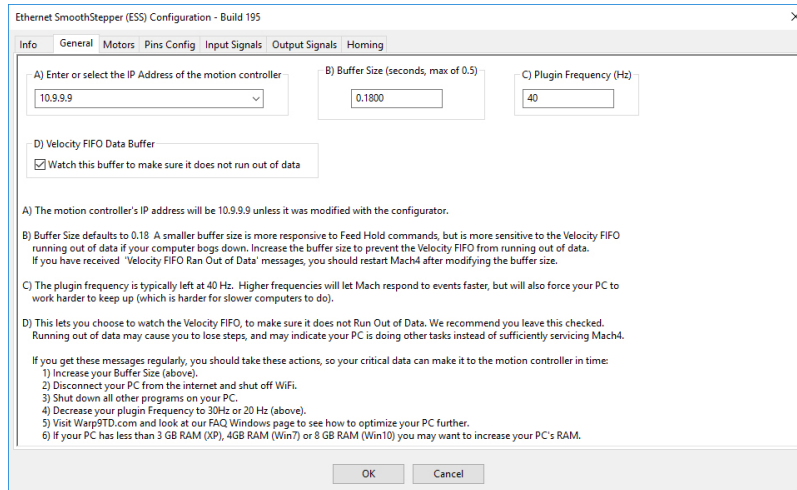
Configuring Mach4

Once your device's plugins are installed, you will need to map the step and direction pins. Devices must be connected to configure.



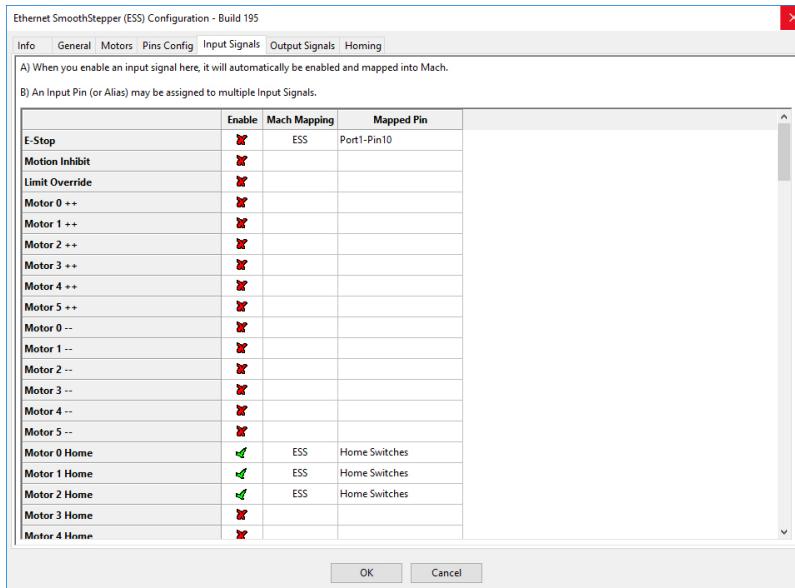
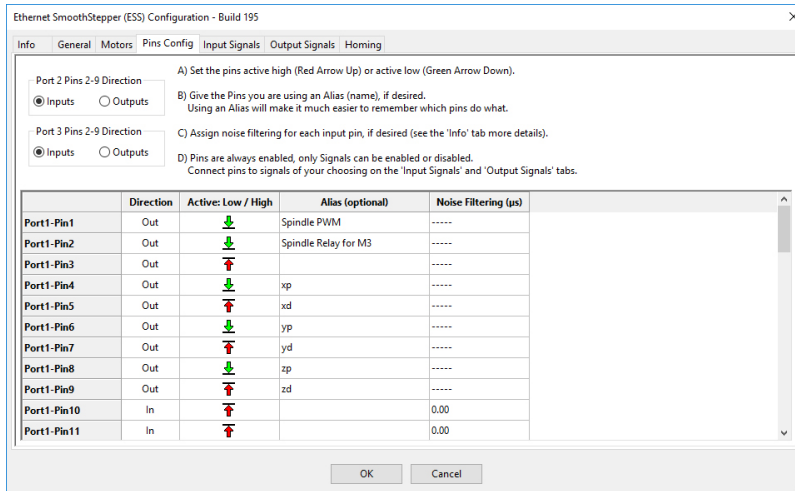
Mach4 Setup

Configuring ESS Plugin



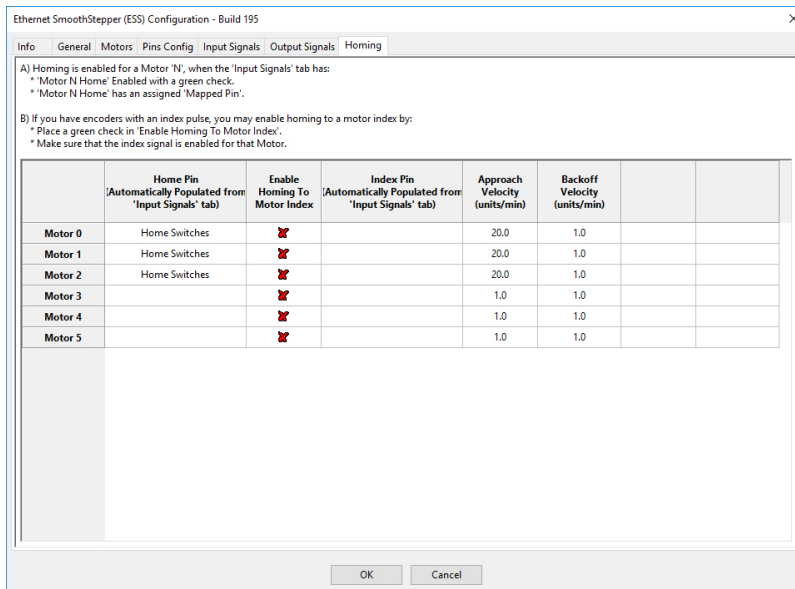
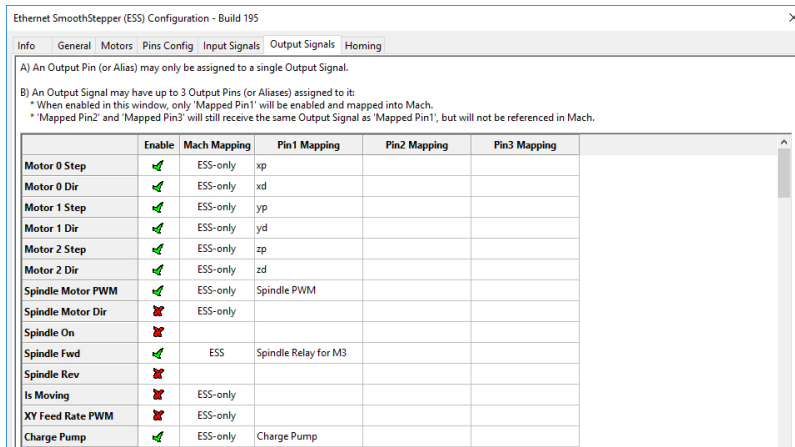
Mach4 Setup

Configuring ESS Plugin



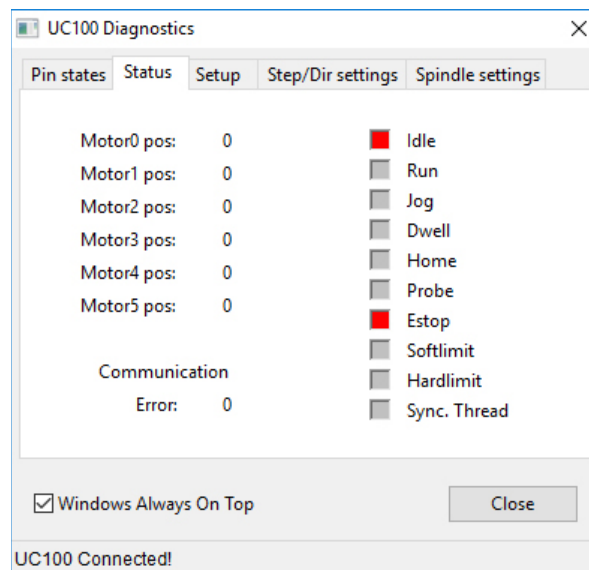
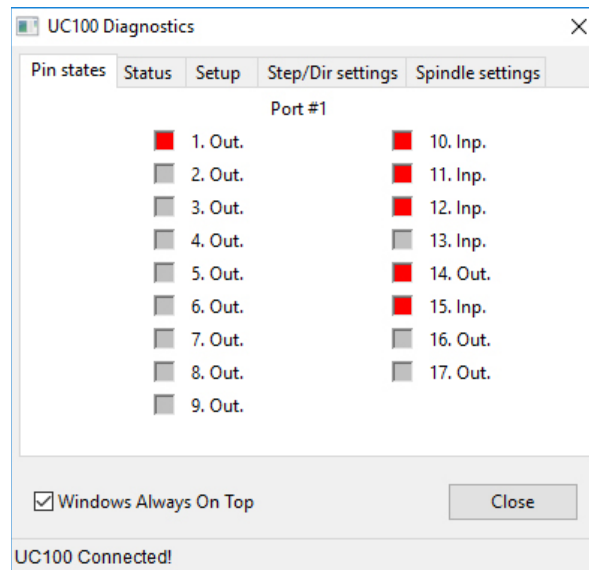
Mach4 Setup

Configuring ESS Plugin



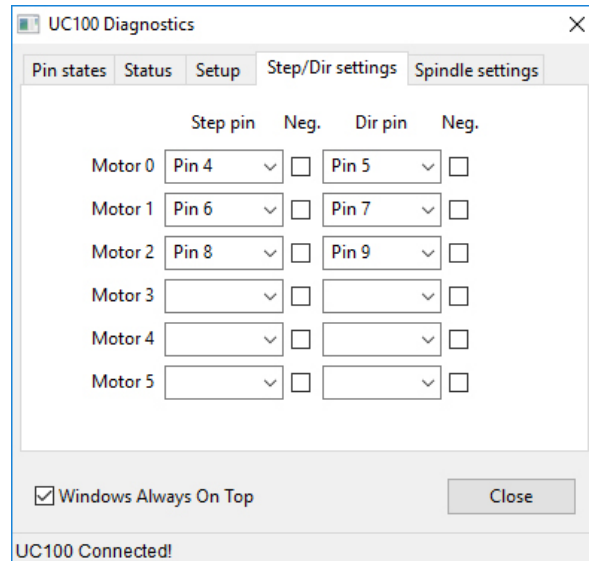
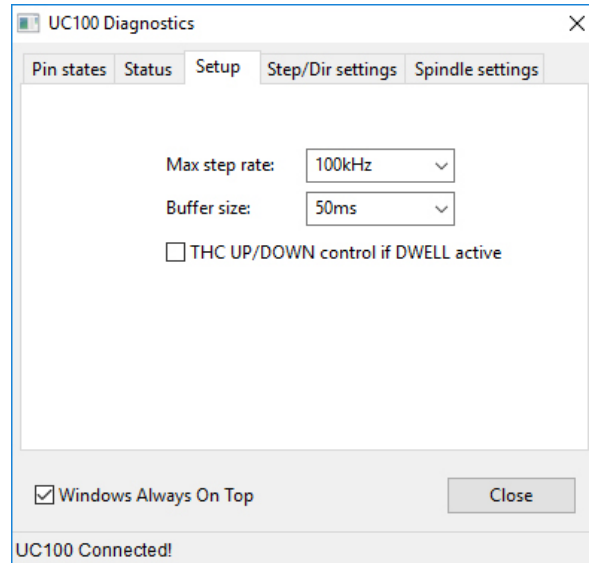
Mach4 Setup

Configuring UC100 Plugin



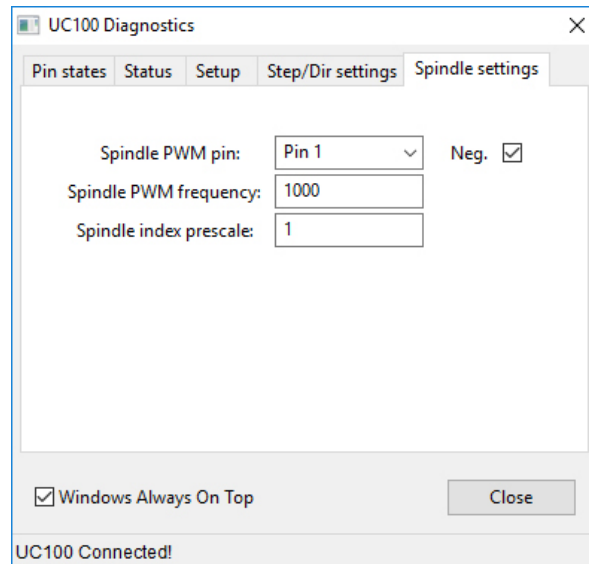
Mach4 Setup

Configuring UC100 Plugin

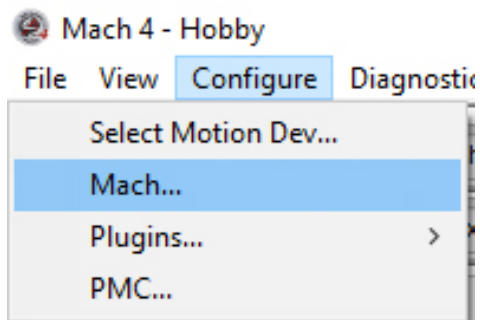


Mach4 Setup

Configuring UC100 Plugin



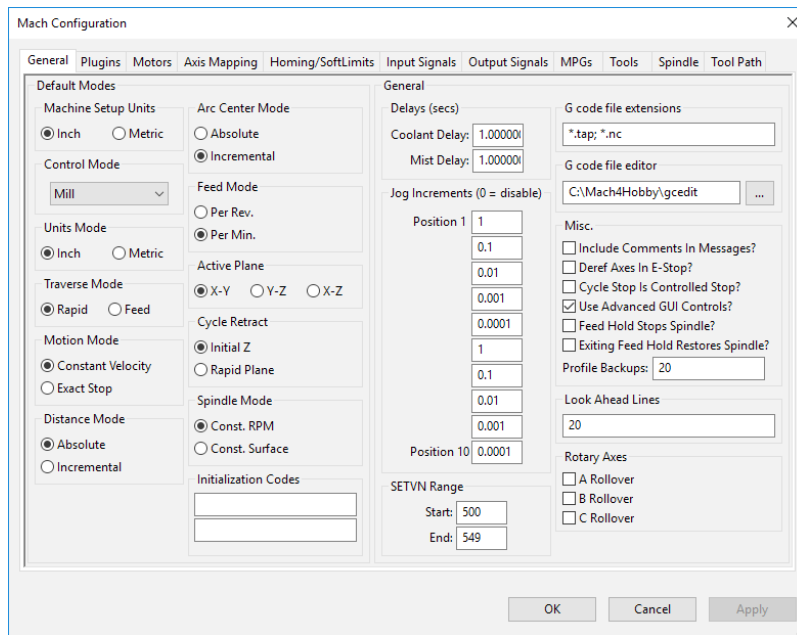
Once you map your pins from the UC100, you need to assign the pins in Mach config.



Mach4 Setup

Configuring Mach4(con't)

This is the first tab of the configuration. If you are just getting started, it's best to leave this page alone.



You will have to enable the hardware plugin that you plan on using.

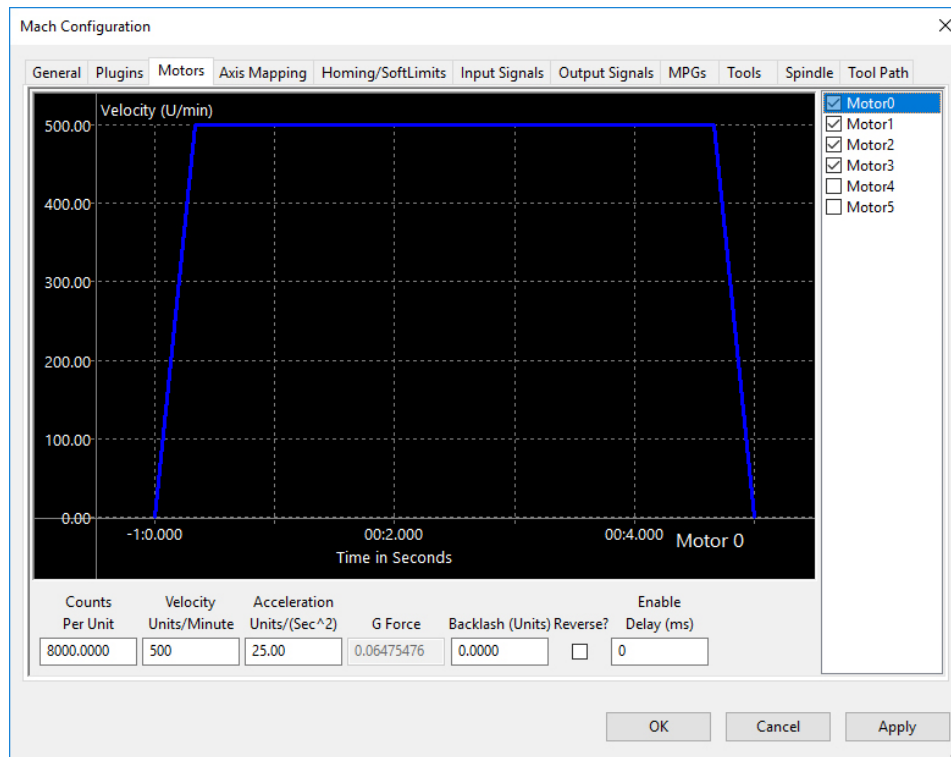
The screenshot shows the 'Mach Configuration' dialog box with the 'Plugins' tab selected. It displays a table of installed and available plugins. Red arrows point to the 'UC100 - CNCDrive' and 'ESS - Warp9 Tech Design, Inc.' plugins, which are currently disabled.

	Enabled	Description	Version
1		Core - Newfangled Solutions	4.2.0.3481
2		Keyboard Inputs - Newfangled Solutions	4.2.0.3481
3		LUA - Newfangled Solutions	4.2.0.3481
4		Modbus - Newfangled Solutions	4.2.0.3481
5		Regfile - Newfangled Solutions	4.2.0.3481
6		Serial - Newfangled Solutions	4.2.0.3481
7		ShuttlePro - Newfangled Solutions	4.2.0.3481
8		Simulator - Newfangled Solutions	4.2.0.3481
9		UC100 - CNCDrive	1.0.11
10		ESS - Warp9 Tech Design, Inc.	1.0.1.105

Mach4 Setup

Configuring Mach4(con't)

This is your motor tuning page. We will be covering how to set up your scaling and steps per unit further into the manual.

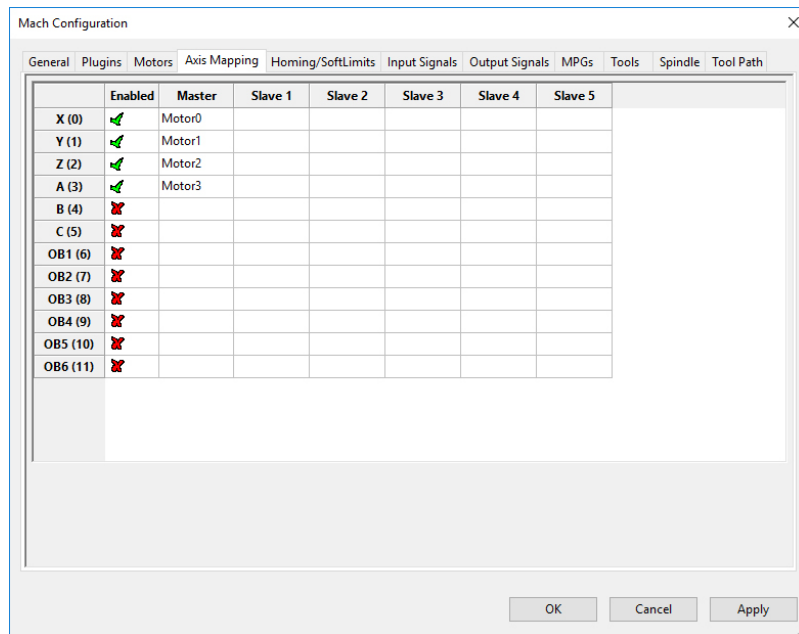


Mach4 Setup

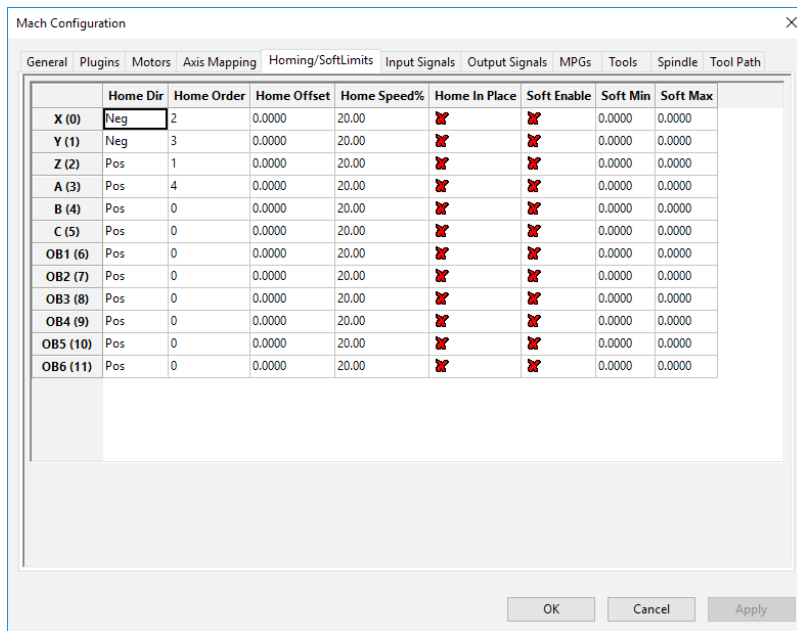
Configuring Mach4(con't)

Here, we are mapping the motors that we assigned from the hardware plugins page.

Motor 0 will be your X-Axis
Motor 1 will be your Y-Axis
Motor 2 will be your Z-Axis
Motor 3 will be your A-Axis



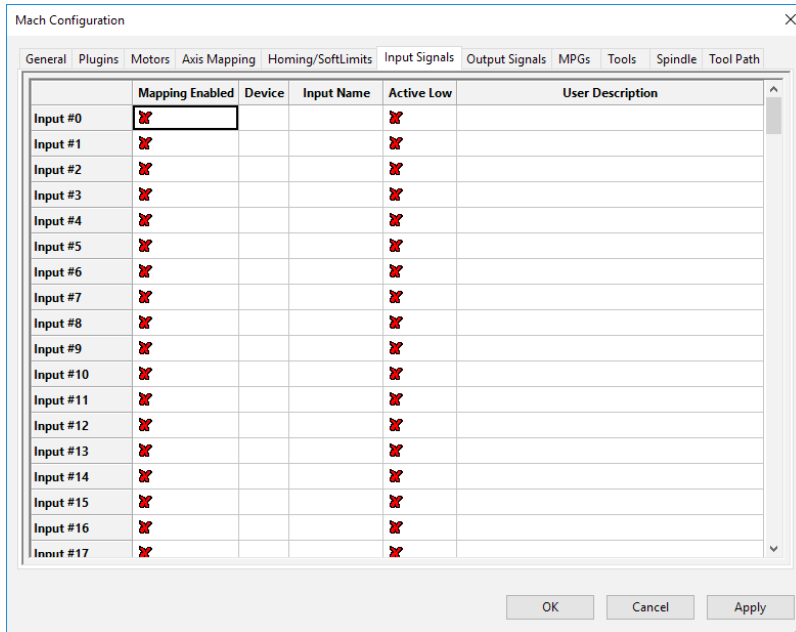
Homing and SoftLimits tab allows you to set imaginary boundaries around your table. This is useful if you only have home switches and no limit switches.



Mach4 Setup

Configuring Mach4(con't)

Input signals is where you assign your limit and home switches and any other inputs like a probe or a tool height setter.



Mach4 Setup

Configuring Mach4(con't)

Once you assign your motors to the appropriate axes, you will want to set up your scaling in motor tuning. There's an easy wizard called "Steps Per Unit Calculator Basic"

Select your Axis

Input your current steps per unit (Configure > Mach> Motors)

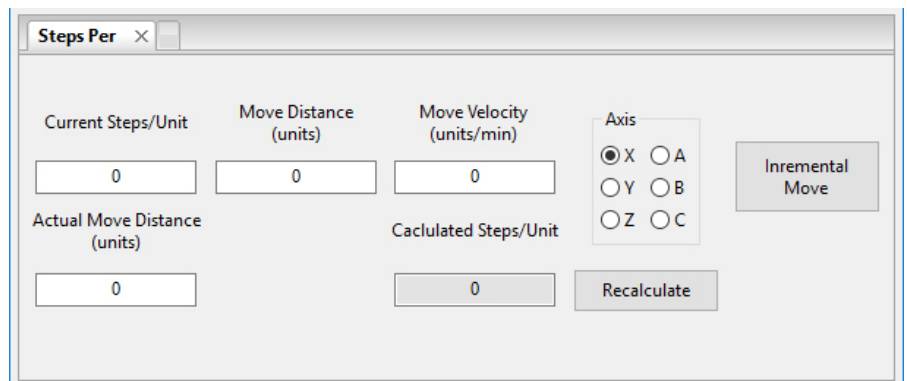
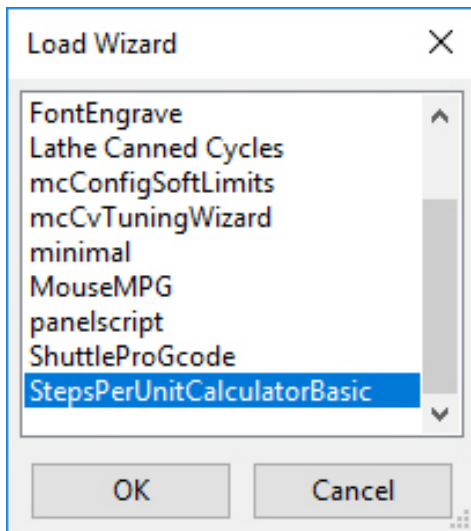
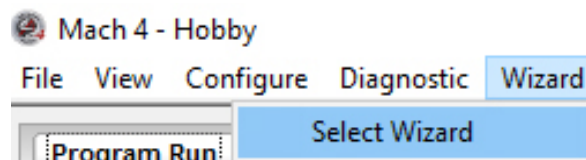
Input a distance you want your machine to move. (Start with 5 or something low)

Input move velocity (100in/min)

Once you click Incremental Move, the machine will move what it thinks is your "input distance"

Take the physical distance and input it into "Actual Move Distance"

Click recalculate



Mach4 Setup

Mach4 Setup
