General Questions

Should I connect the "Enable" input on my motor drivers?

We usually recommend that for any motor driver with an "enable" or "disable" input, you hard-wire the driver to the "enabled" state or verify that leaving the input unwired will enable the driver. Please note the the industry norm for stepper motor drivers is to have an input called Enable, and leaving this input unused will result in the driver enabled for normal operation. Actively driving this input will disable the driver. Seems backwards, but we did not set the standard.

If you have a Mach output signal (say the Mach4 "Enable #0") configured to control the motor driver's "enable" input, it will disable the motor driver every time you disable Mach. When the motor driver is disabled, it stops driving current through the motor's coils. If the motor is a stepper motor and it is not at a "full step" position, it **could** move due to magnetic forces in the motor. When you re-enable Mach, thus re-enabling the motor driver, the motor **could** snap back to a different position than it was before you disabled Mach4. There is no guarantee this will or will not happen. It depends on your motors and the mechanics of your drive train. If it *does* happen, then you will have to re-home your system every time you enable Mach.

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Author: Bob
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