

Lab 8

Stepper Motor Control

This lab familiarizes the student with step motor control using a Microchip PIC.

1. Create a new project with lab08.asm. Connect your hardware according to the diagrams in the lecture slides. Run the program and watch the motor rotate. The motor should rotate counter-clockwise. If it does not, you will have to change the wiring to the motor.

When you halt the program, **always reset the program or disconnect the power**, otherwise the motor will continue to draw current from the 7805 voltage regulator. The 7805 may get fairly hot when running the stepper motors.

2. Estimate the motor speed by counting the number of revolutions in 60 seconds (or longer for more accuracy).
3. Change the `WaitTime` constant in the code to see how it affects the speed of the motor.