

schematic diagram

MOTOR CONTROL WORKSHOP



dc motor

- + high motor speed, up to 50.000 U/min
easy to control (+/-)
very different types, from very small up to very big and strong
- complex to produce ---> expensive
not for longlife applications, ca. 5.000h, because of moving mechanical parts

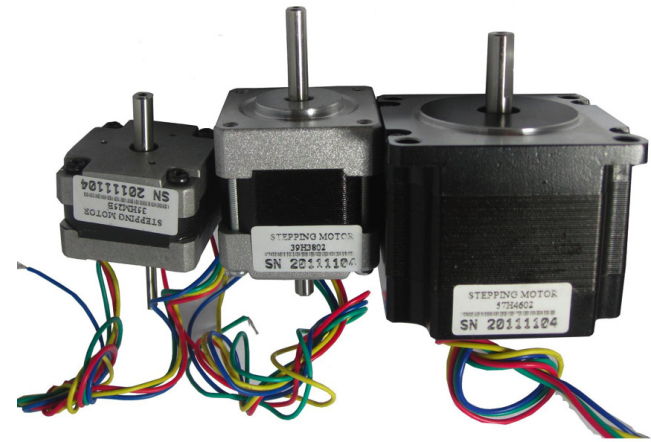


servo

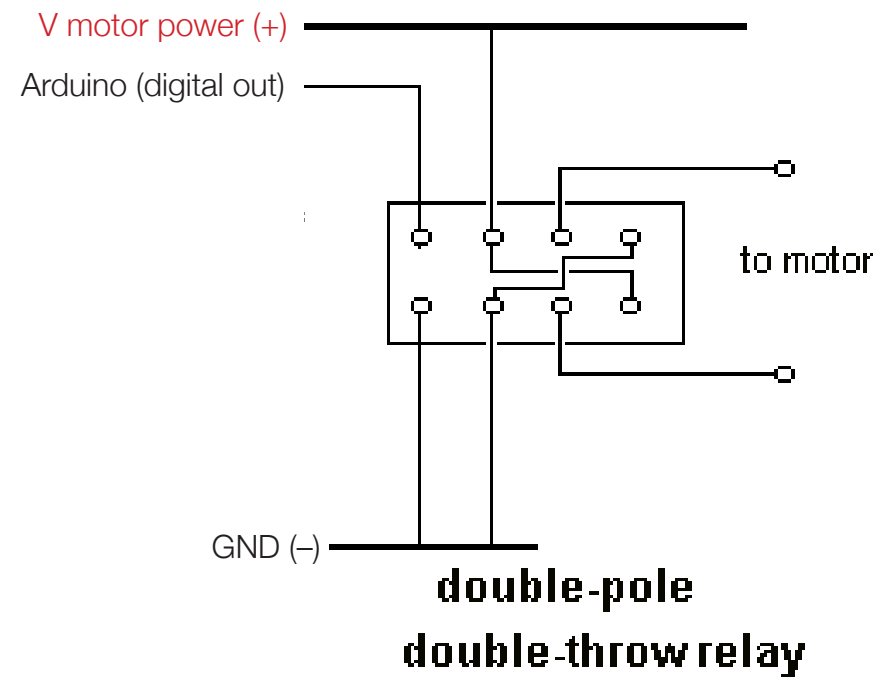
- + -for fast positioning
-good for analog controlling
-high torque, because of gear
-small configuration
-cheap (RC-building, not for the professional)
- not so precise, depends on the build-in potentiometer
only for small performance
not for longlife applications, because of moving mechanical parts

steppermotor

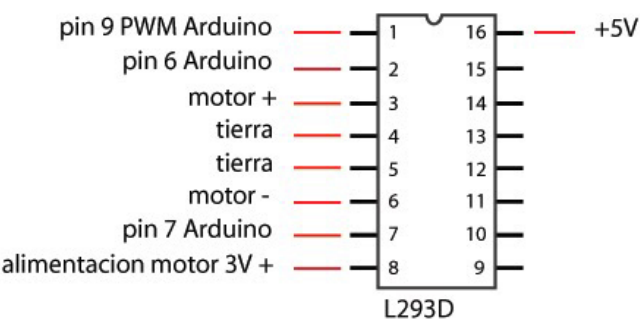
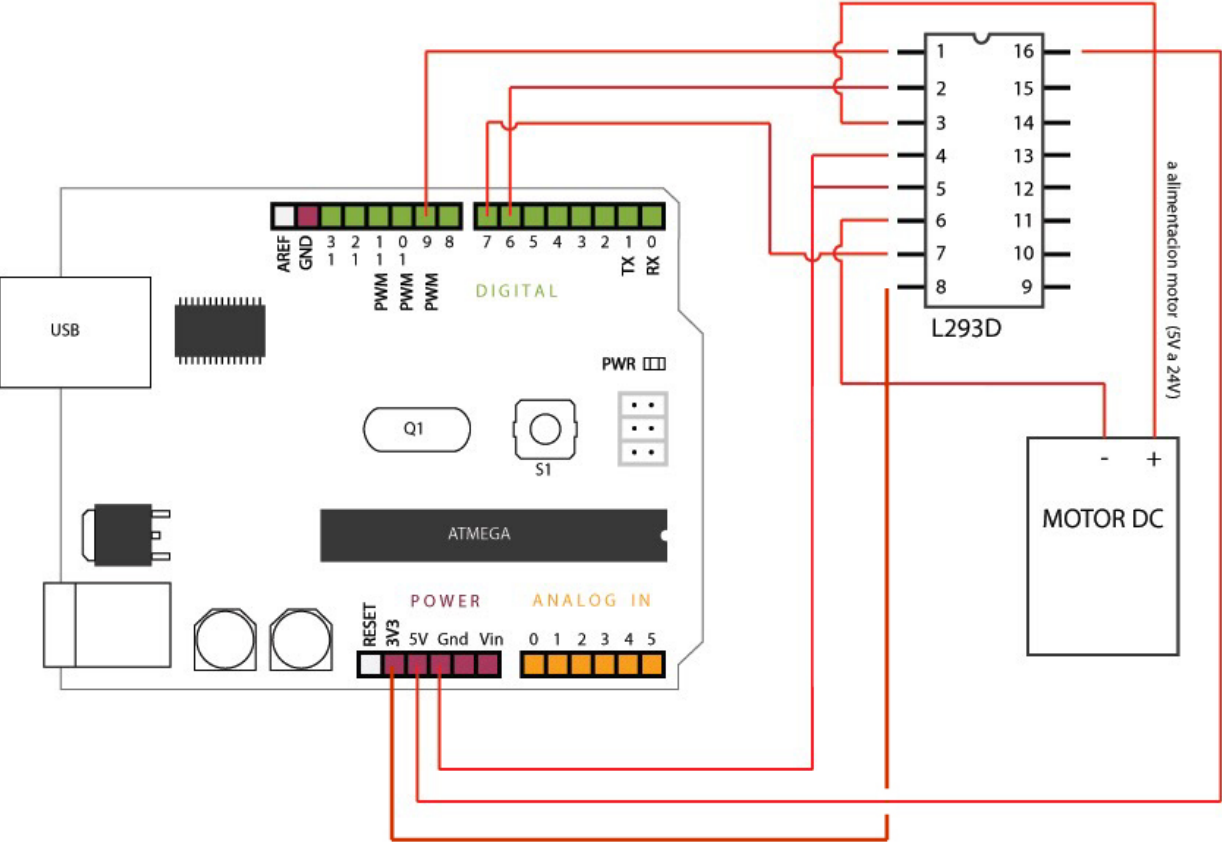
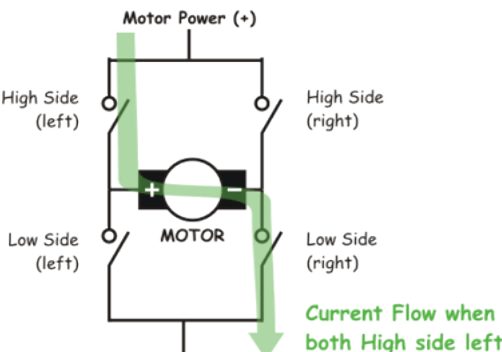
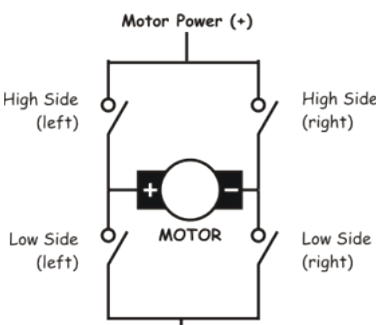
- + -for fast and exact positioning
-large variety of different types
-cheap, because not so complex
- -motor speed max. up to 1.000 U/min, low torque
-not so easy to control.
-without extra position-system (like rotary encoder)
-> not save (you could loose steps)



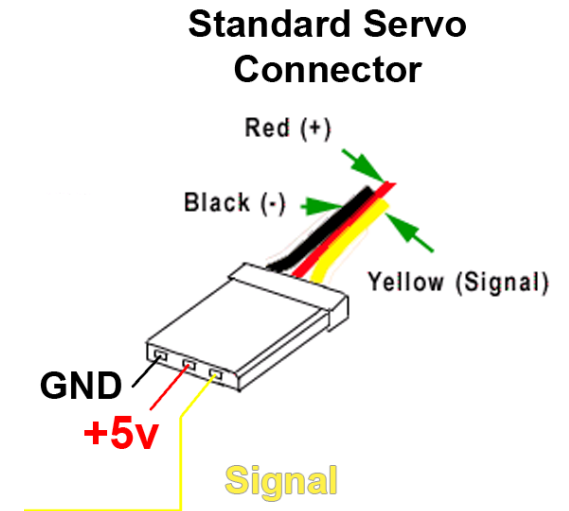
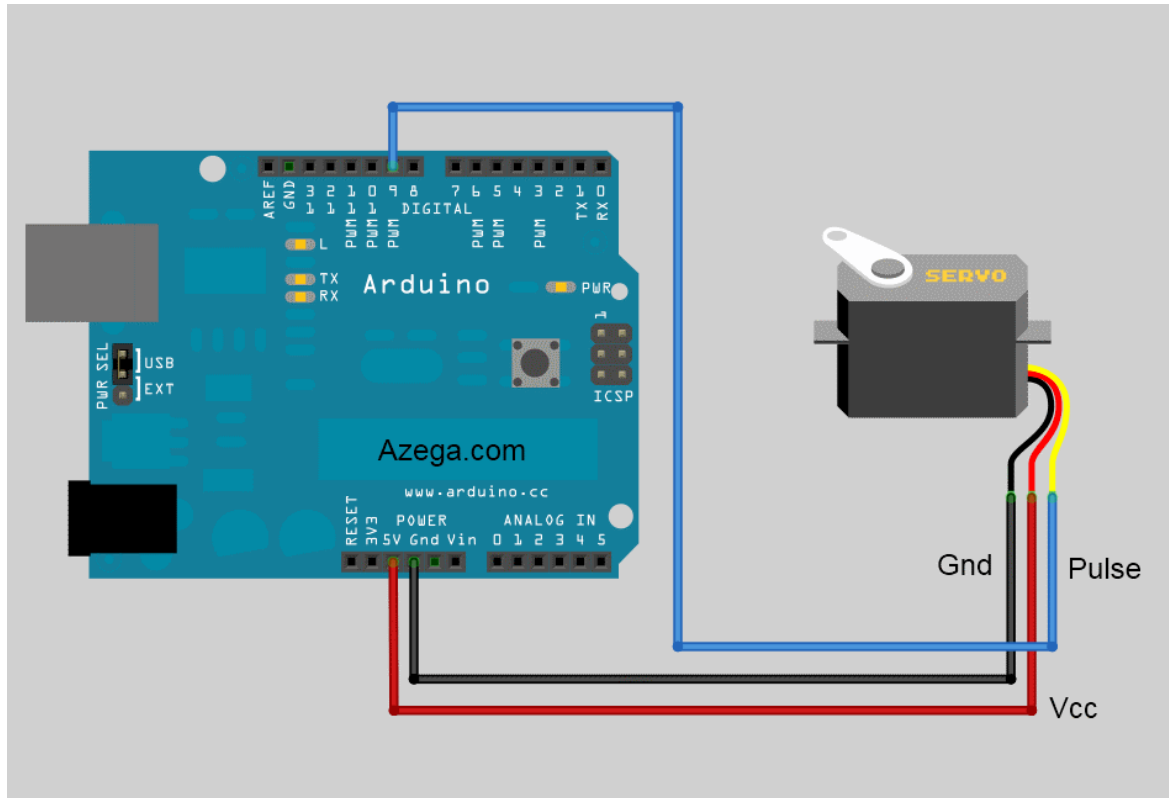
dc motor vs. relais



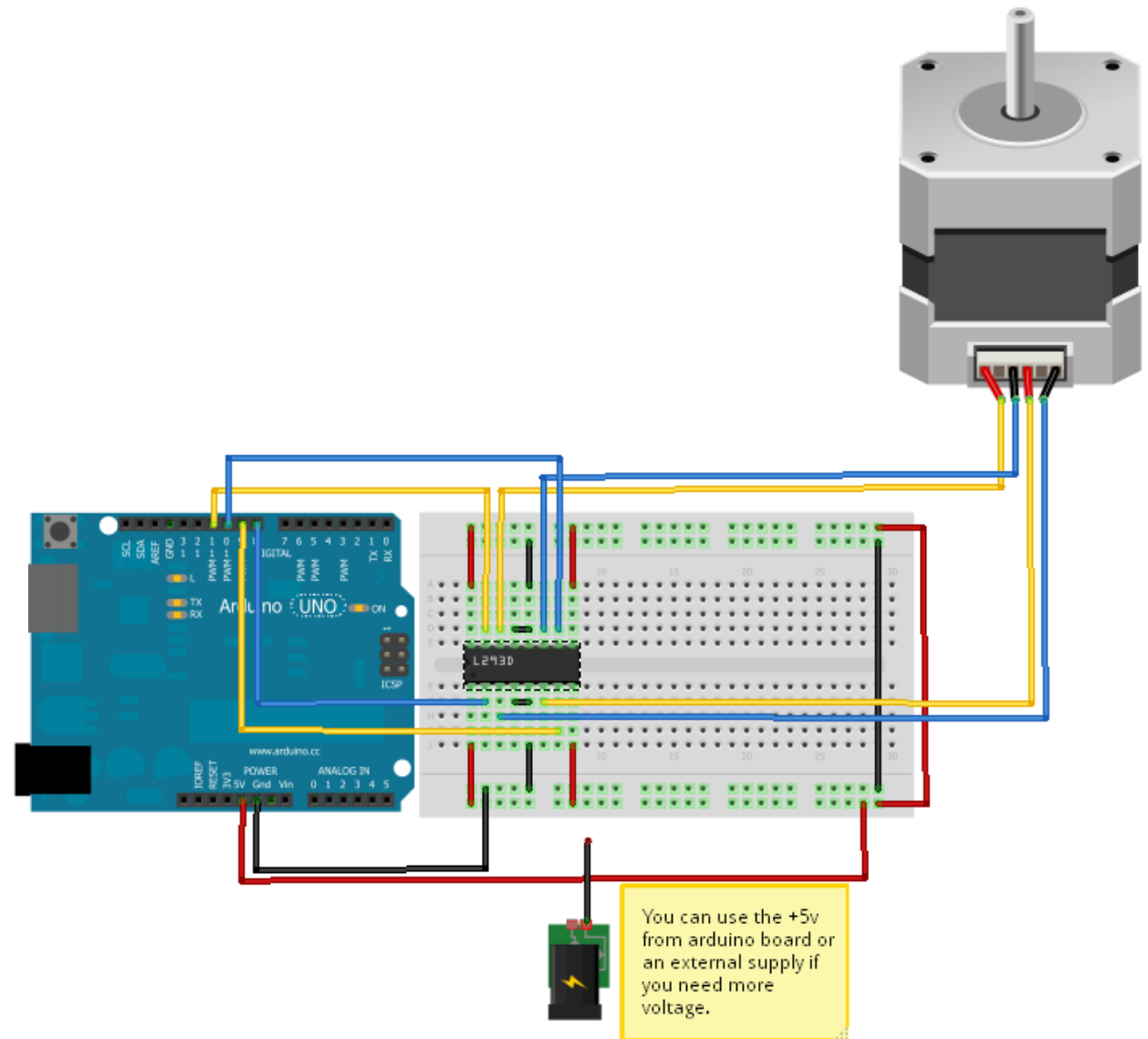
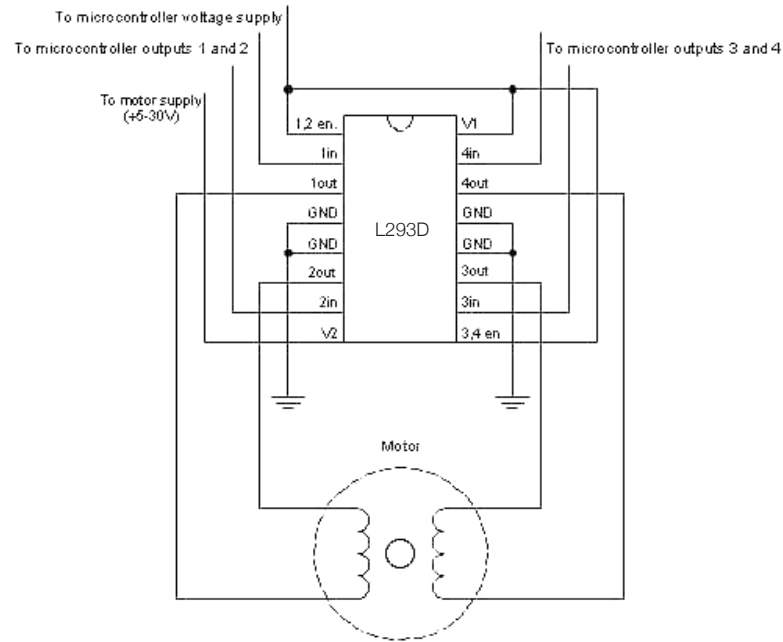
dc motor vs. L293D [h-bridge]



servo motor vs. arduino



steppermotor vs. arduino and L293D [h-bridge]



steppermotor vs. arduino and stepperdriver [Pollulu]

