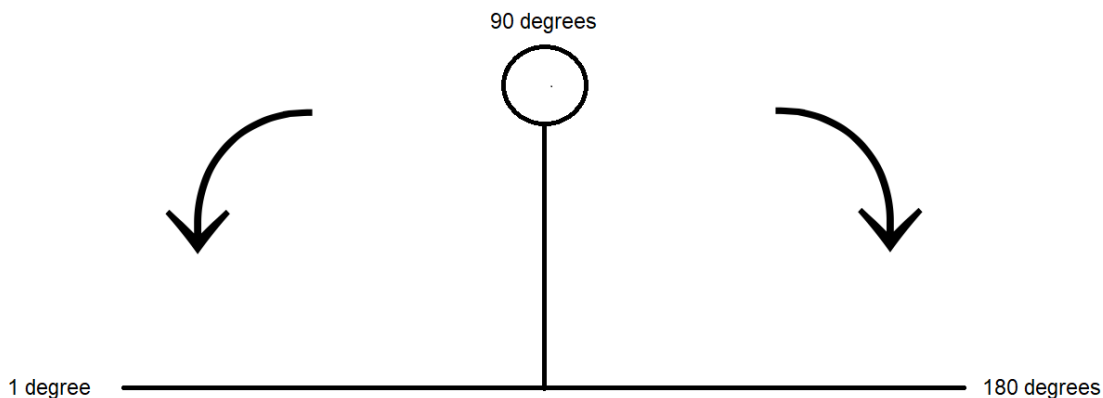


Motor Control

Throttle

A throttle is an instrument used in some kinds of motorized vehicles, such as boats, to control speed. These throttles behave in a particular way; the position of the throttle is what dictates the speed and direction of the motor. For example, a throttle may begin in a position which has the motor stopped. When the throttle is pushed forward from that position the motor begins to move forward. The farther forward the throttle is pushed, the faster the motor moves in that direction. If, instead, I pull the throttle backwards, the motor will begin moving backwards, with it picking up speed as I pull the throttle back further and further.

As it turns out, our continuous servo motors behave very similarly;



We can give our motors a command including an angle. Our continuous servo motors understand that angle as moving a throttle back and forth. You can see by the picture above that 90 degrees represents the middle position of the throttle, which would have the motor stopped. An angle larger than 90 will begin moving the motor in one direction, with the speed increasing as the angle approaches 180. Likewise, an angle less than 90 moves the motor in the opposite direction, with the speed increasing as you approach 1.