INput

2 kinds: Digital + Analog

Digital
on/off

Analog
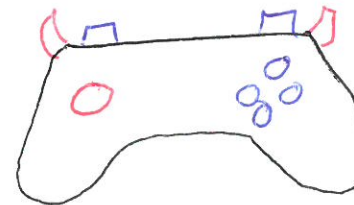Float
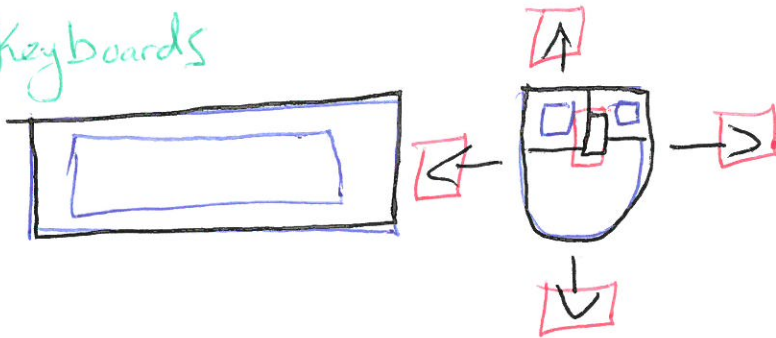
Switch

Keyboards

NES

XBOX

Game ~~Pads~~ Thumb Stick

Springs try to return ~~the~~ Thumb Stick to 0,0.

3 competing Needs | Generic for Any Analog Input
- very responsive to 0,0
- Return to 0,0
- Ramp

Dead Zone
$$if (|x| < .01)$$
$$x = 0;$$

Ramp Function

Output

O

Physical Signal

Simple linear
Smooth linear

Ramp function
$$F(x) = x^2$$