ACTUATION AESTHETICS LAB

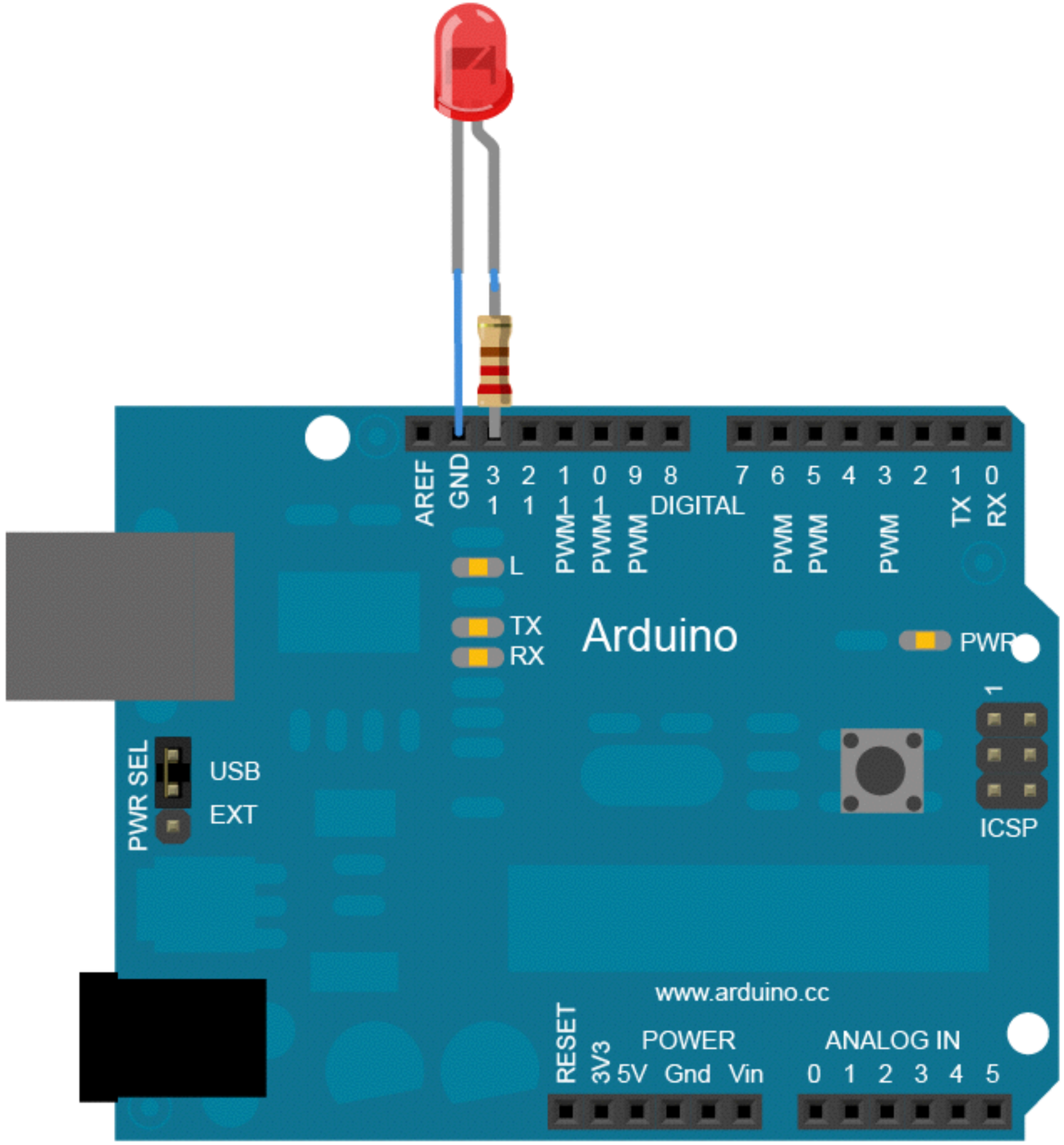
Tangible User Interfaces

31 OCTOBER 2016

REVISIT

DAY 1

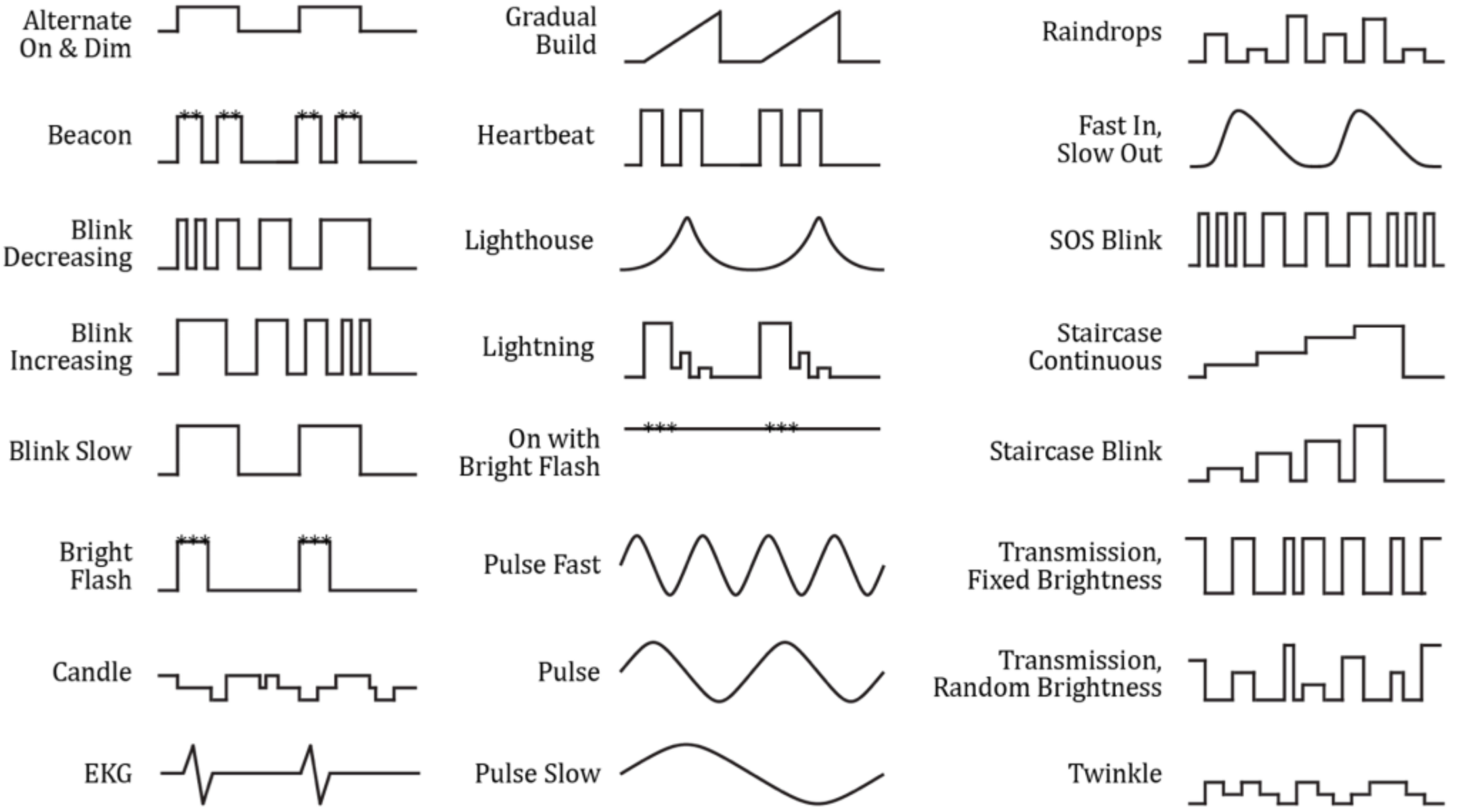
OF PHYSICAL COMPUTING


AREF
GND
3 2 1 0 9 8
1 1 1 1
PWM PWM PWM
DIGITAL
7 6 5 4 3 2 1 0
PWM PWM PWM
TX RX
L
TX
RX
Arduino
PWR
PWR SEL
USB
EXT
1
ICSP
www.arduino.cc
RESET
3V3
POWER
5V Gnd Vin
ANALOG IN
0 1 2 3 4 5

BLINK

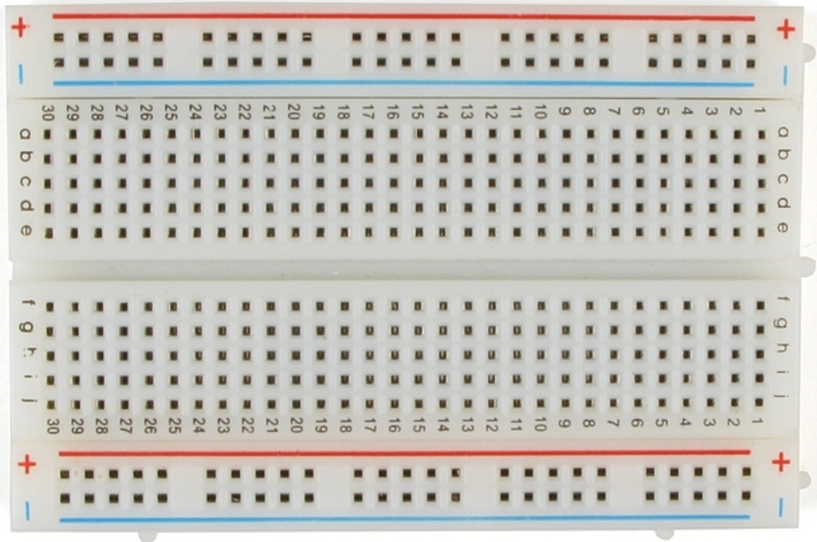
FADE

...

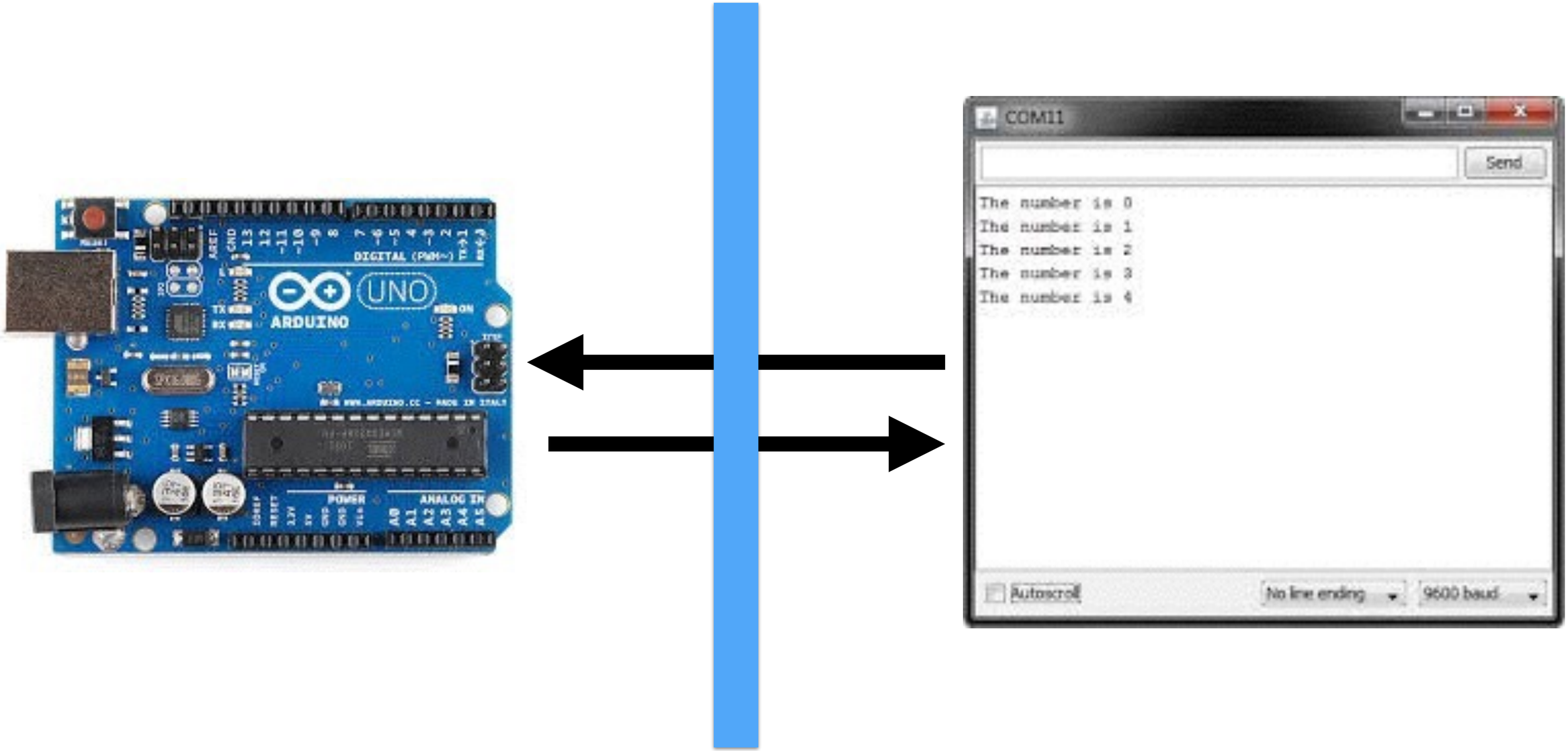


C. Harrison et al. “Unlocking the expressivity of point lights,” HFCS ‘12

BREADBOARD ACTOR

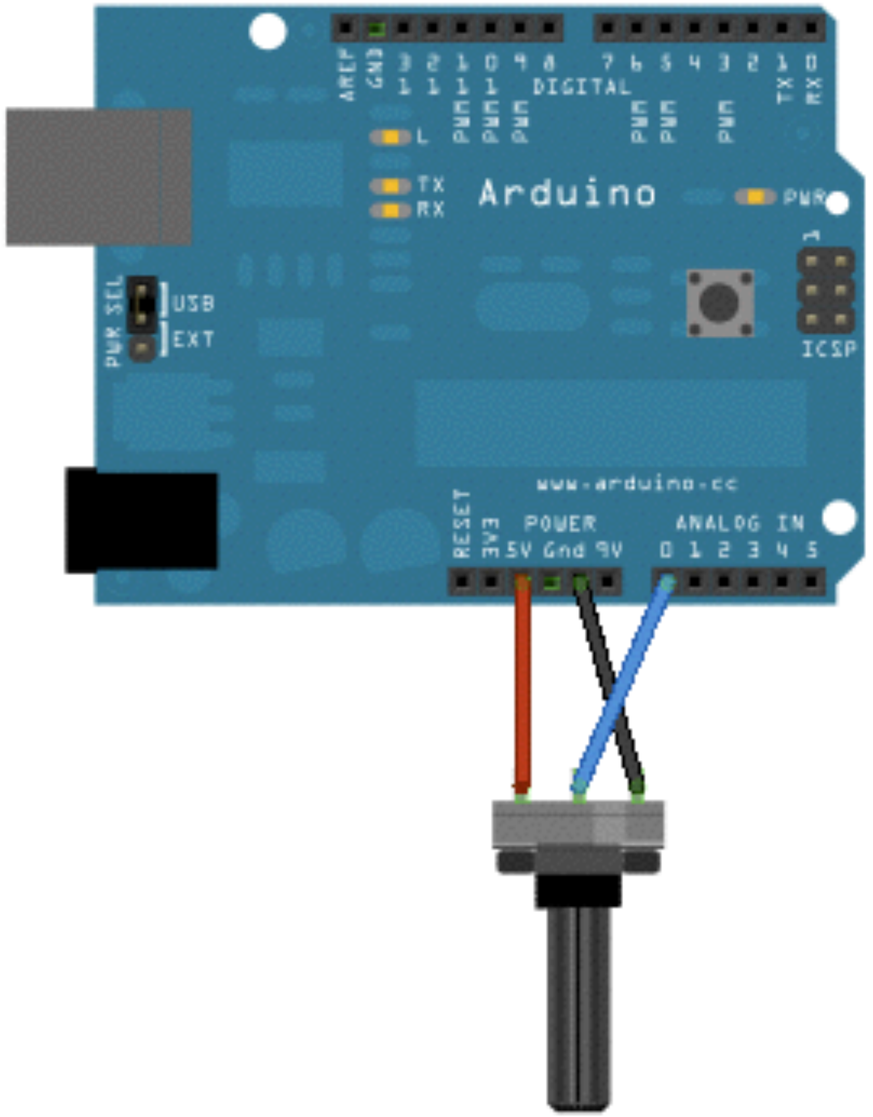


SERIAL API INTERFACE



CODE WALKTHROUGH

https://github.com/cearto/labs


AREF
GND
DIGITAL
L
TX
RX
Arduino
PWR
PWR SEL
USB
EXT
ICSP
www.arduino.cc
RESET
3V3
POWER
5V
Gnd
9V
ANALOG IN
0 1 2 3 4 5

DESIGN PROMPT

20 MIN

PAIRS OF 3

DESIGN A SET OF BEHAVIORS

< 3 seconds long

1-3 LEDs

Point light or distributed light

BEHAVIORS

UTTER FAILURE

ERROR

WARNING

CALM

VICTORY!

ACTUATION AESTHETIC

ENFORCING A CALM TURN-STYLE

ACTUATION AESTHETIC

RESTRICTION