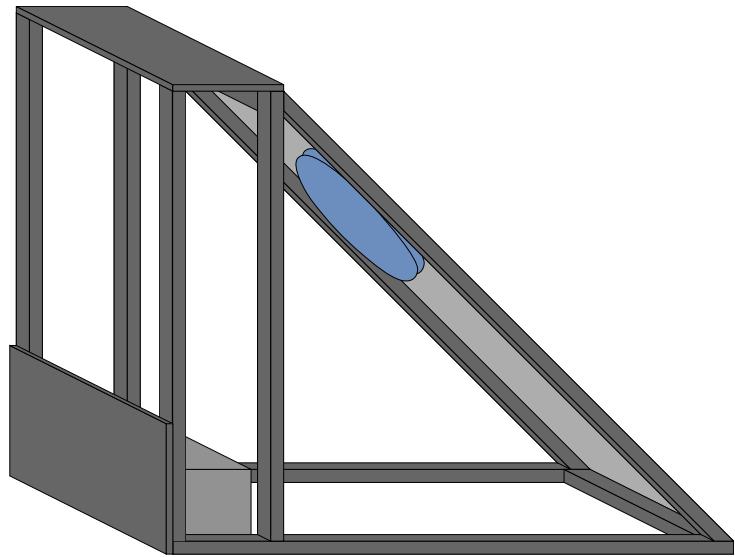


ColorClock

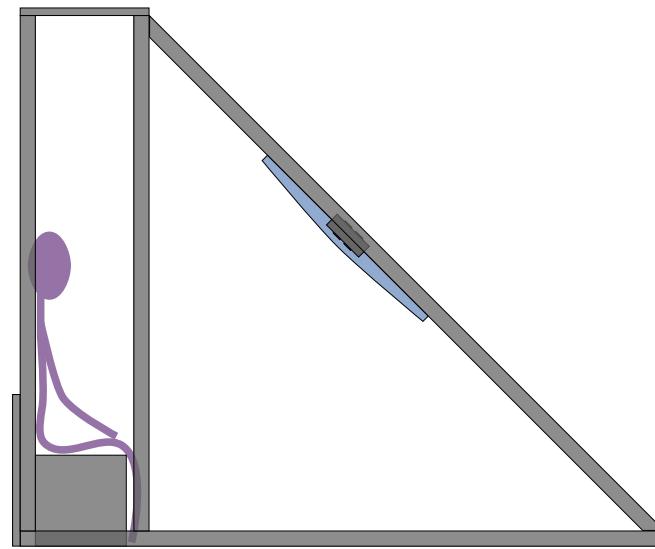
a project by

Lagomorphic Constructs

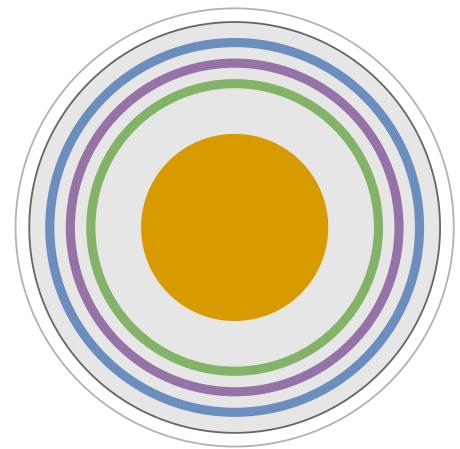
Introduction



ISOMETRIC VIEW



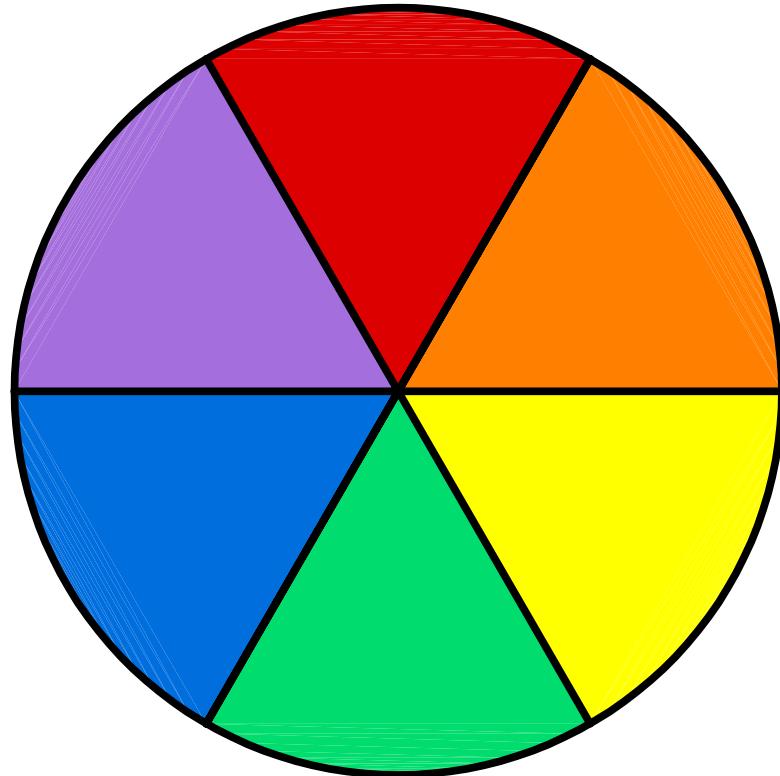
SIDE VIEW



LIGHT DISPLAY

Background

Pigment Primary Colors: Red, Yellow, Blue



Red

0%

Yellow

50%

Blue

50%

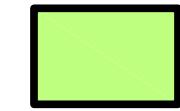
Result



0%

75%

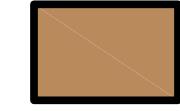
25%



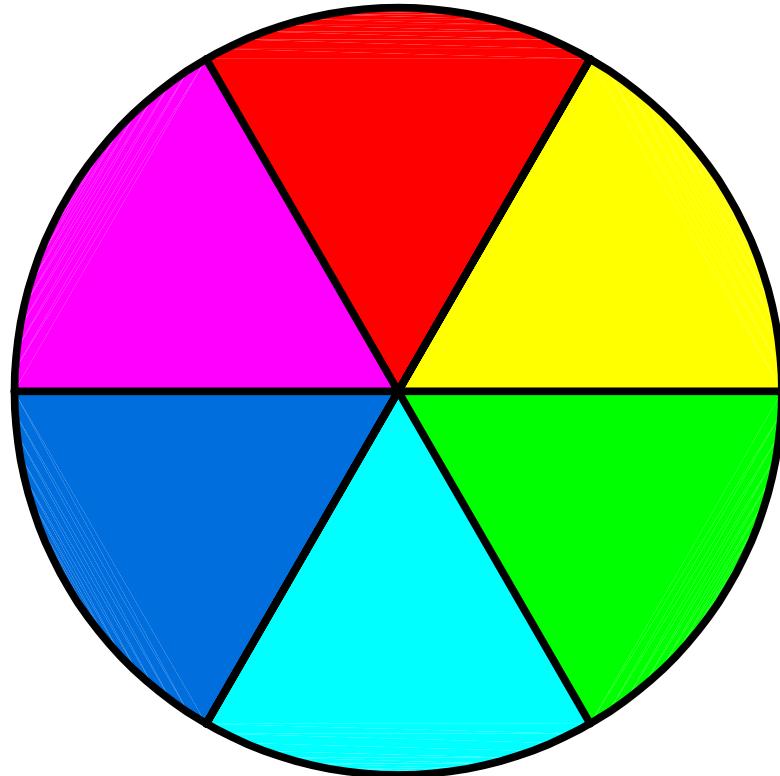
33%

33%

33%



Light Primary Colors: Red, Green, Blue



Red

Green

Blue

Result

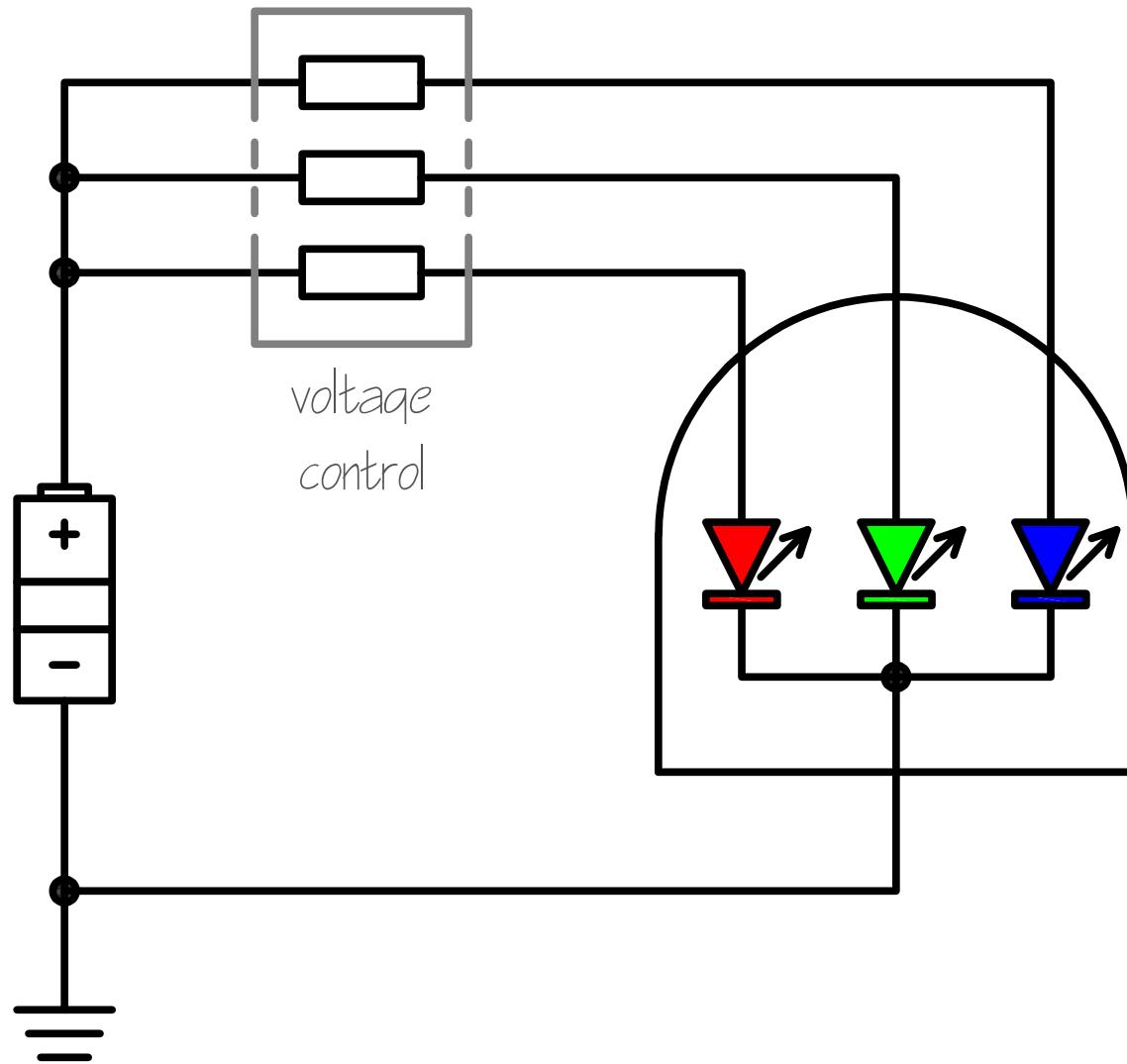
$$\begin{array}{c} \text{Red} \\ \boxed{50\%} \\ + \end{array} + \begin{array}{c} \text{Green} \\ \boxed{50\%} \\ + \end{array} + \begin{array}{c} \text{Blue} \\ \boxed{0\%} \\ = \end{array} \begin{array}{c} \text{Result} \\ \boxed{\text{Yellow}} \end{array}$$

$$\begin{array}{c} \text{Red} \\ \boxed{75\%} \\ + \end{array} + \begin{array}{c} \text{Green} \\ \boxed{25\%} \\ + \end{array} + \begin{array}{c} \text{Blue} \\ \boxed{0\%} \\ = \end{array} \begin{array}{c} \text{Result} \\ \boxed{\text{Orange}} \end{array}$$

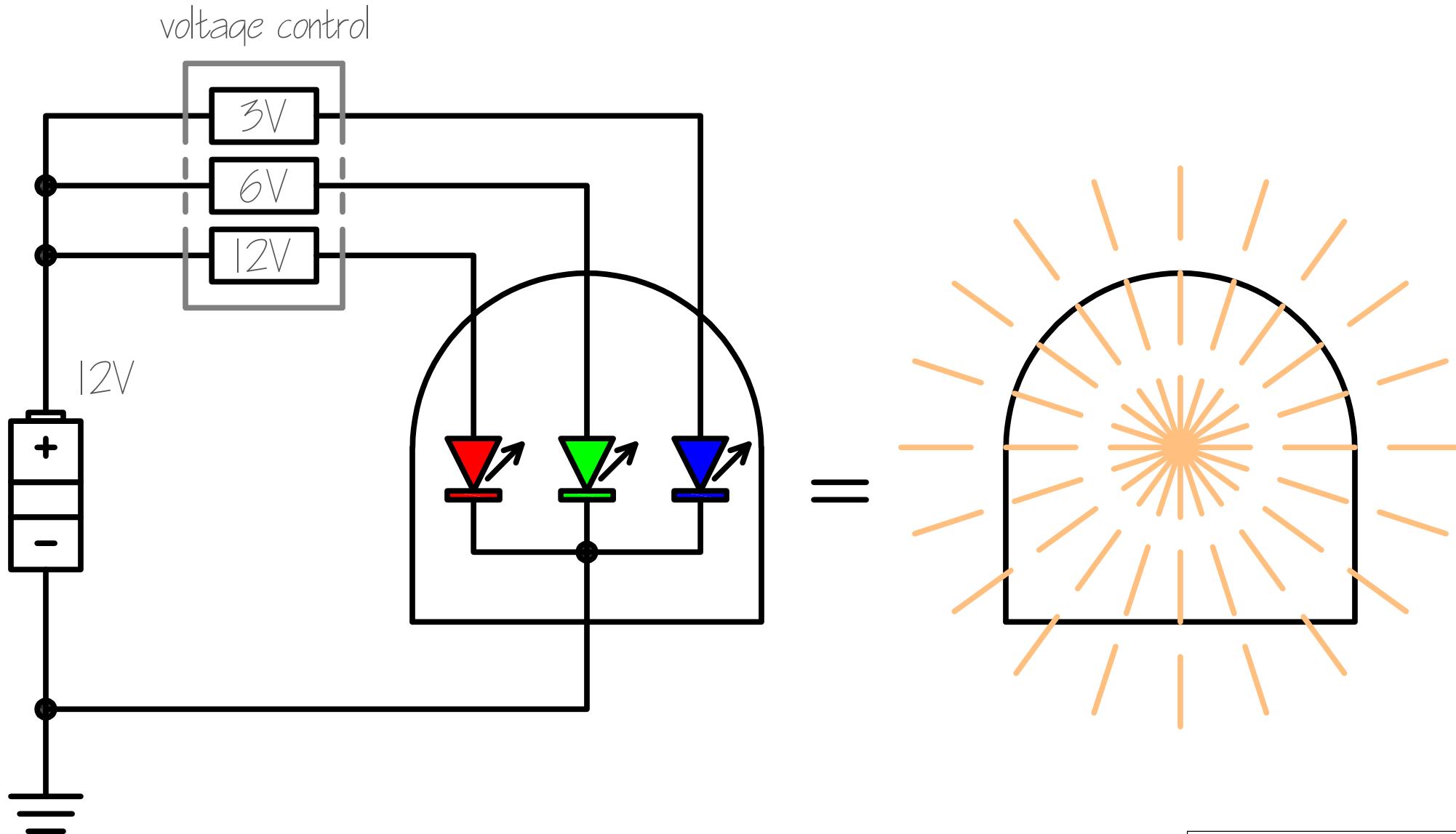
$$\begin{array}{c} \text{Red} \\ \boxed{60\%} \\ + \end{array} + \begin{array}{c} \text{Green} \\ \boxed{30\%} \\ + \end{array} + \begin{array}{c} \text{Blue} \\ \boxed{10\%} \\ = \end{array} \begin{array}{c} \text{Result} \\ \boxed{\text{Light Orange}} \end{array}$$

$$\begin{array}{c} \text{Red} \\ \boxed{33\%} \\ + \end{array} + \begin{array}{c} \text{Green} \\ \boxed{33\%} \\ + \end{array} + \begin{array}{c} \text{Blue} \\ \boxed{33\%} \\ = \end{array} \begin{array}{c} \text{Result} \\ \boxed{\text{White}} \end{array}$$

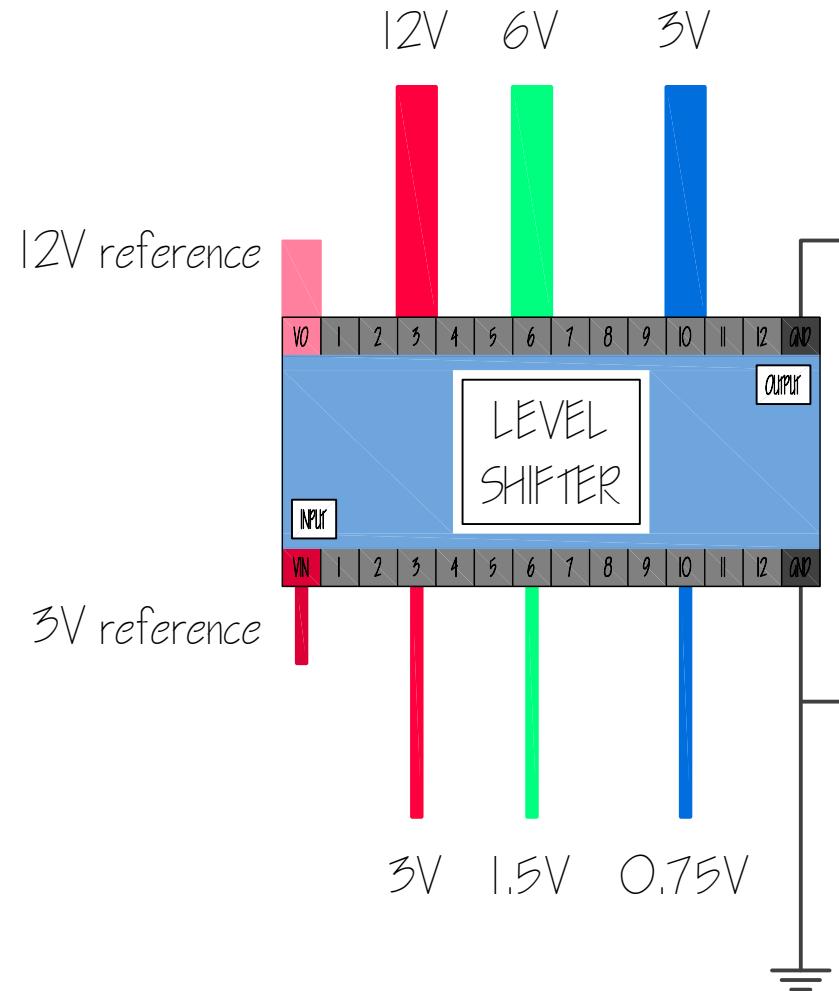
RGB LED Common Anode = Shared Ground



1 Part Blue, 2 Parts Green, 4 Parts Red = Light Orange

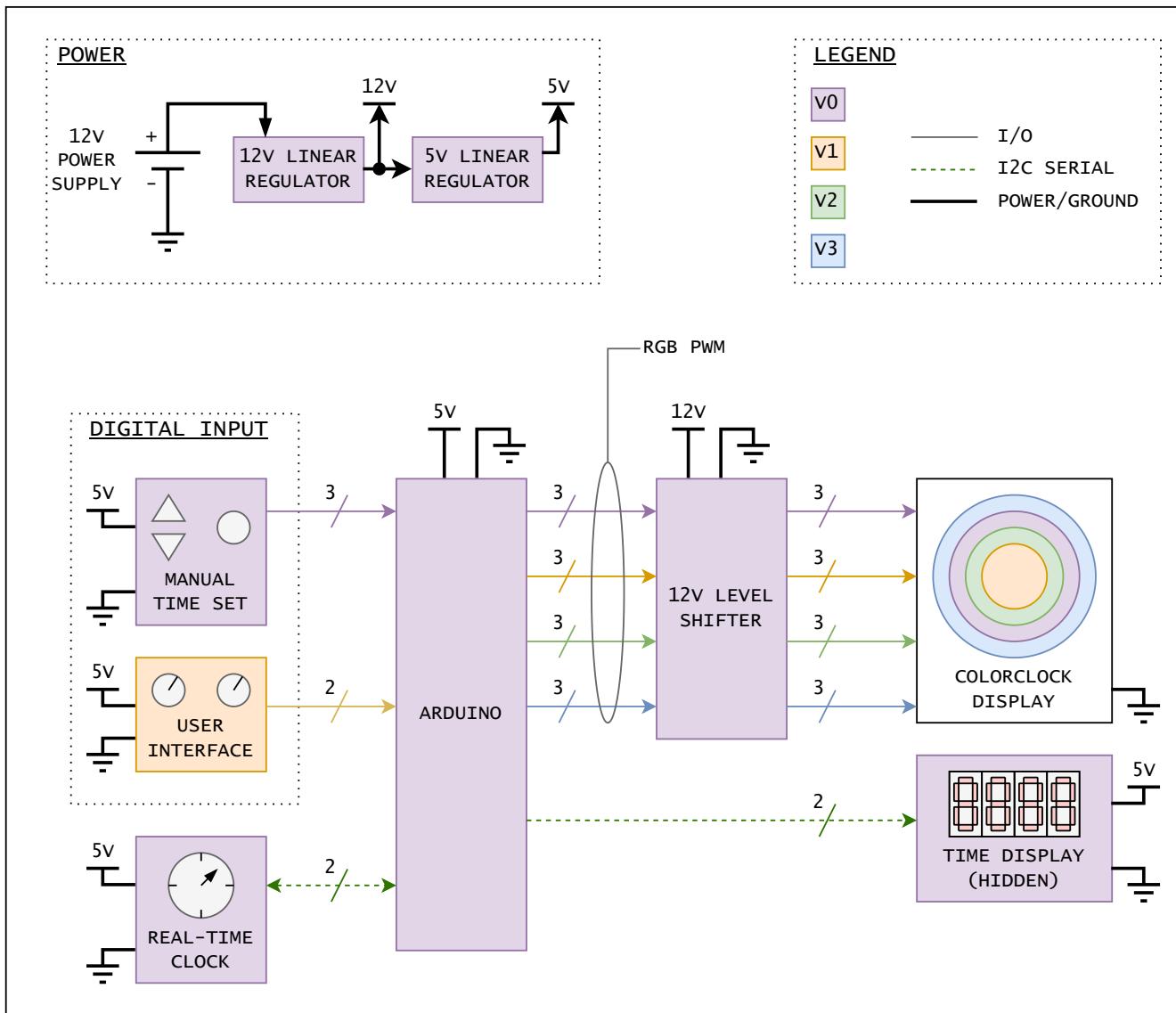


Level Shifter Modifies Output Voltage

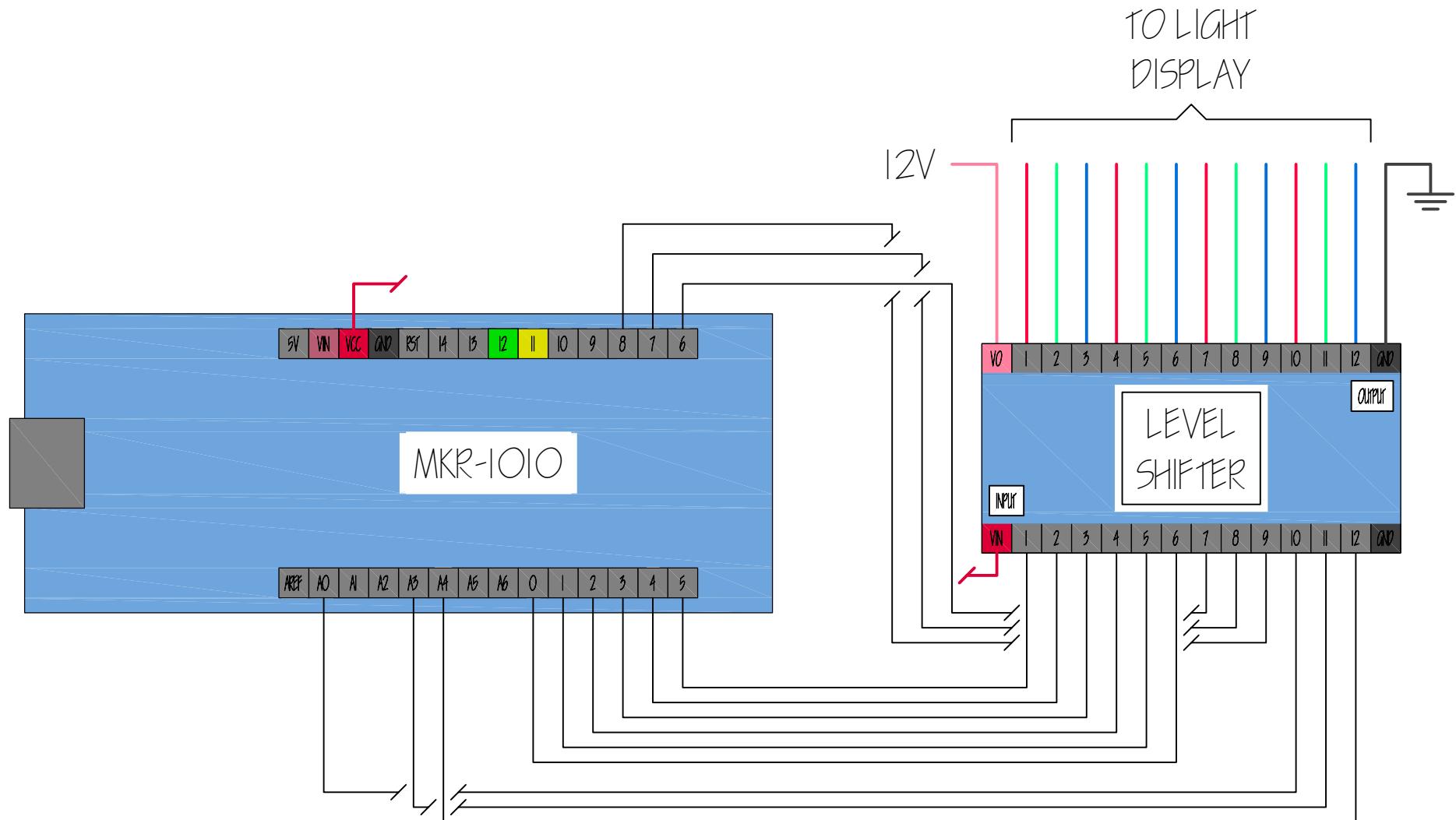


ColorClock

Hardware



Level Shifter Increases Arduino Analog Output



LEVEL SHIFTER CIRCUIT

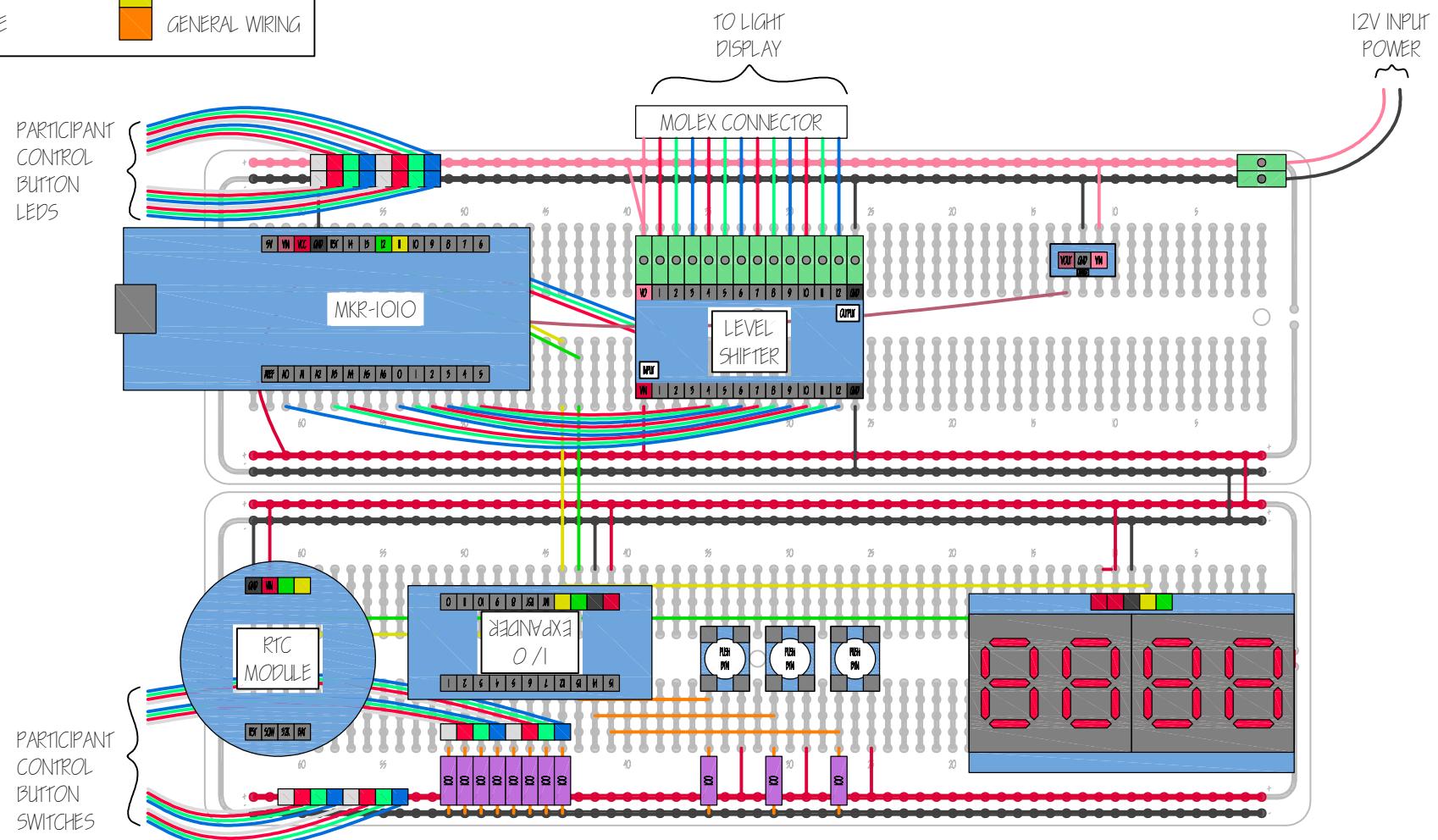
LAGOMORPHIC CONSTRUCTS

AUGUST 2024

REV -

LEGEND

12V	RED LED
3.3V	GREEN LED
GND	BLUE LED
TERMINAL BLOCK	WHITE LED
GENERAL CONTACT	I2C SCLK
RESISTOR	I2C SDA
MODULE	GENERAL WIRING



CIRCUIT BOARD LAYOUT

CIRCUIT BOARD LAYOUT

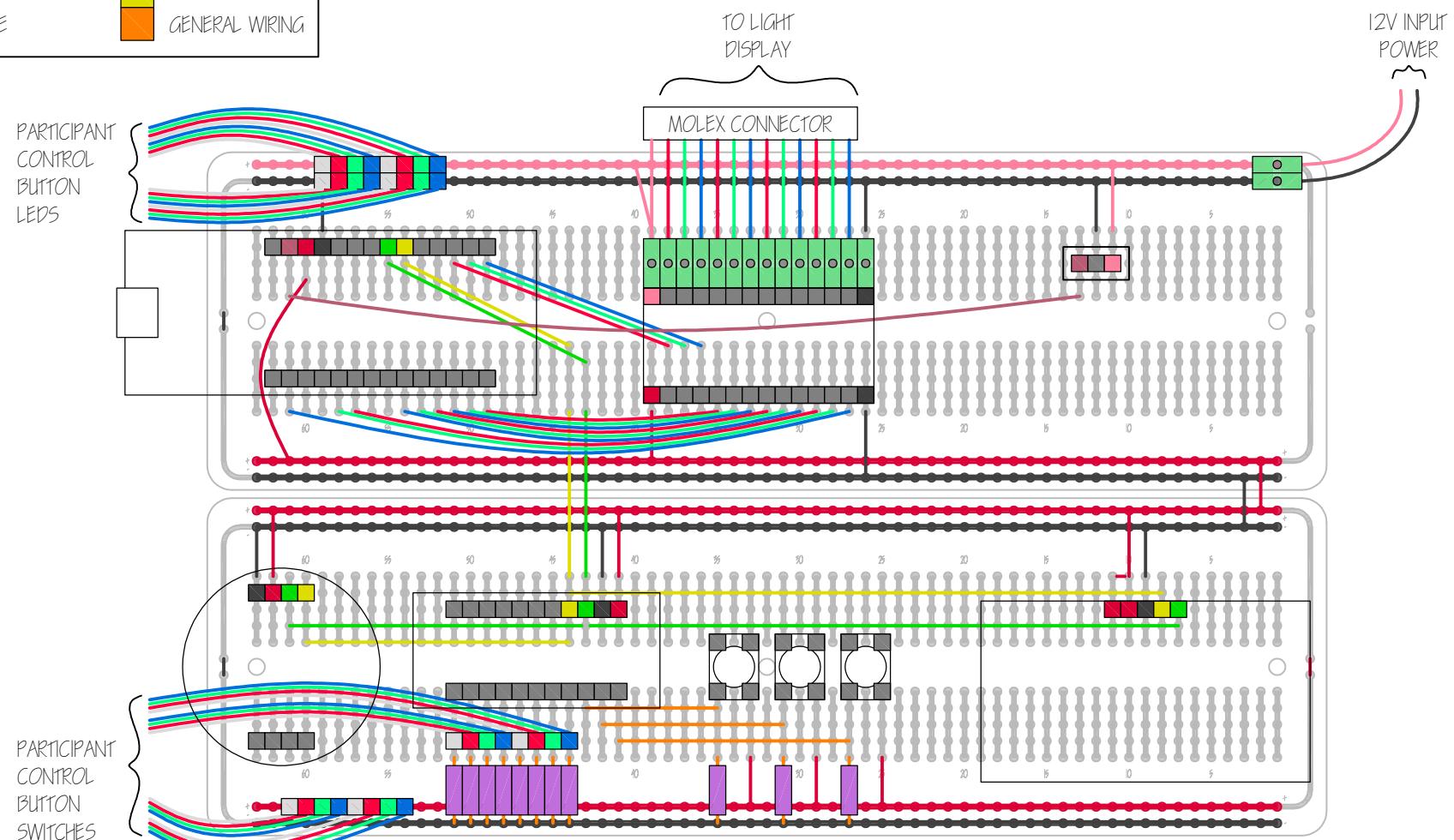
LAGOMORPHIC CONSTRUCTS

JULY 2024

REV -

LEGEND

12V	RED LED
3.3V	GREEN LED
GND	BLUE LED
TERMINAL BLOCK	WHITE LED
GENERAL CONTACT	I2C SCLK
RESISTOR	I2C SDA
MODULE	GENERAL WIRING



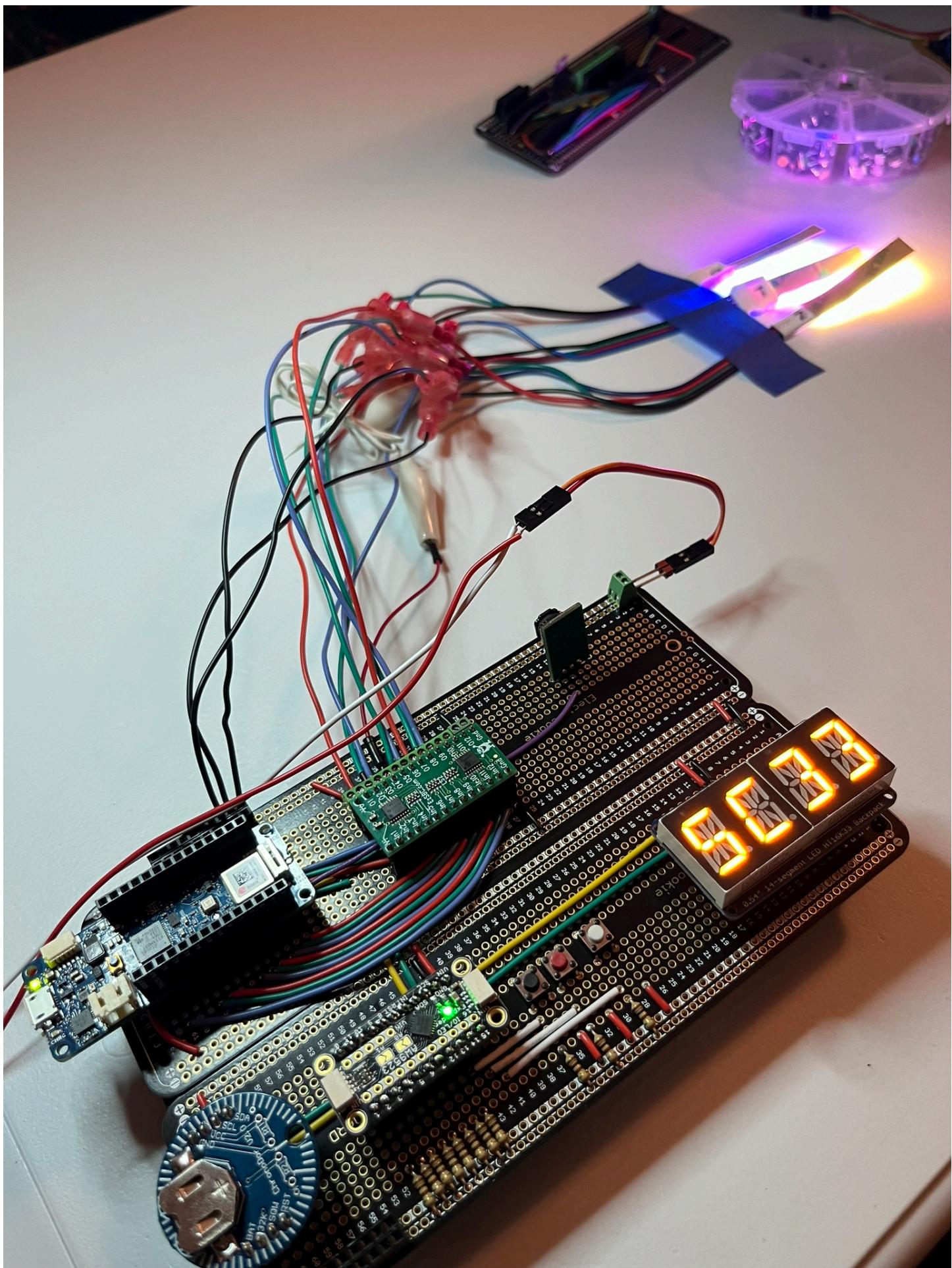
CIRCUIT BOARD WIRING

CIRCUIT BOARD WIRING

LAGOMORPHIC CONSTRUCTS

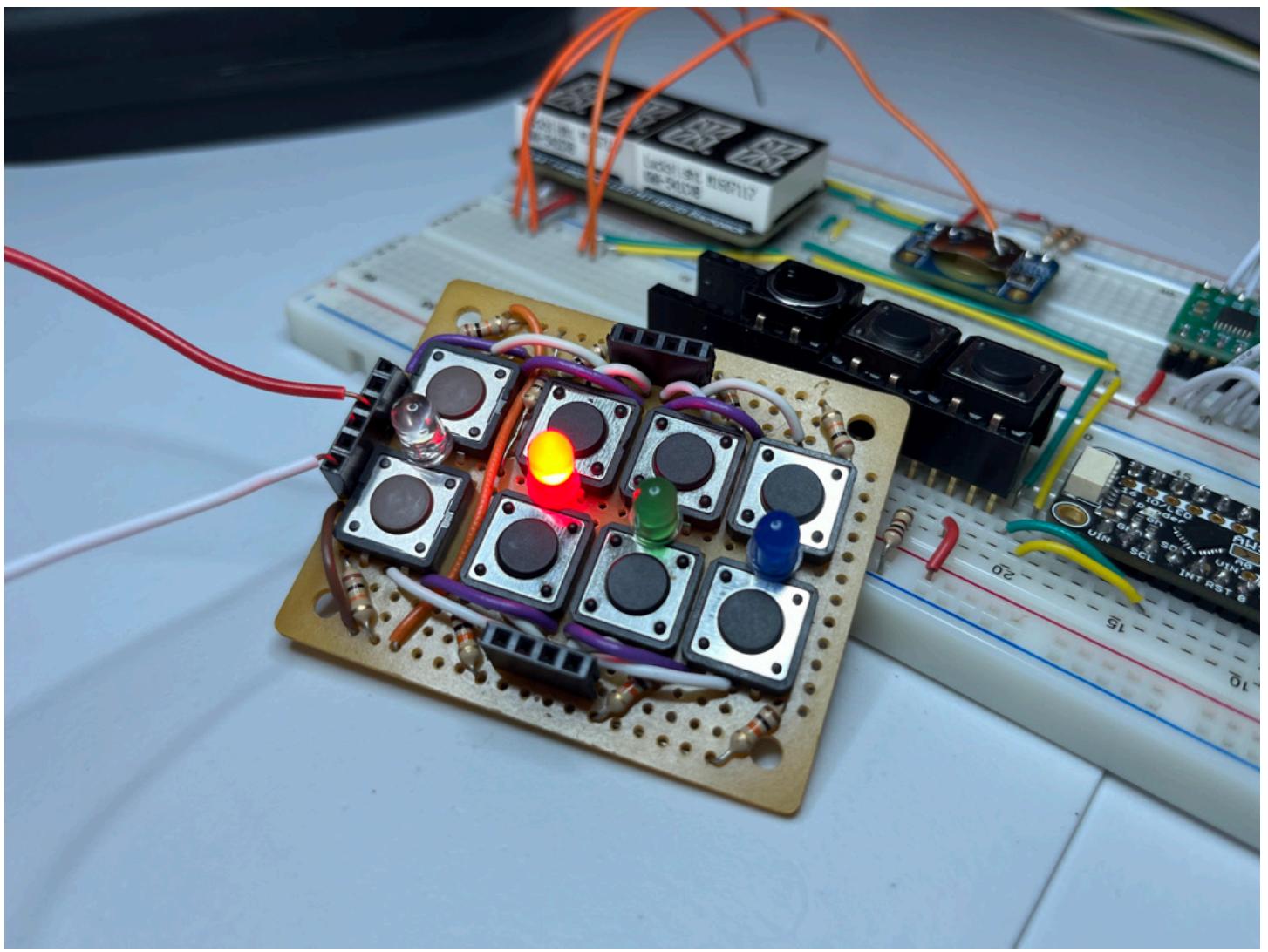
JULY 2024

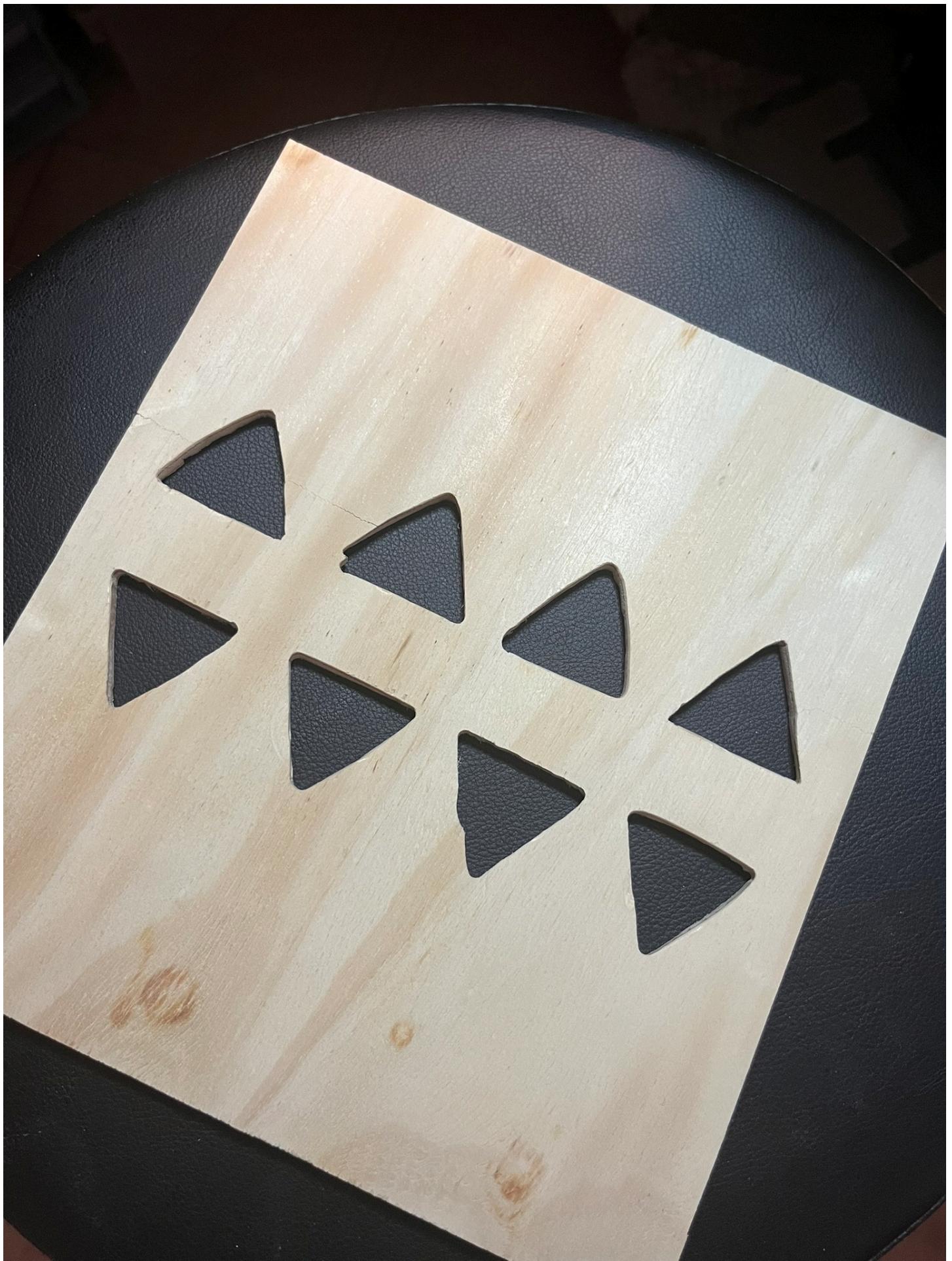
REV A



Participant

Control



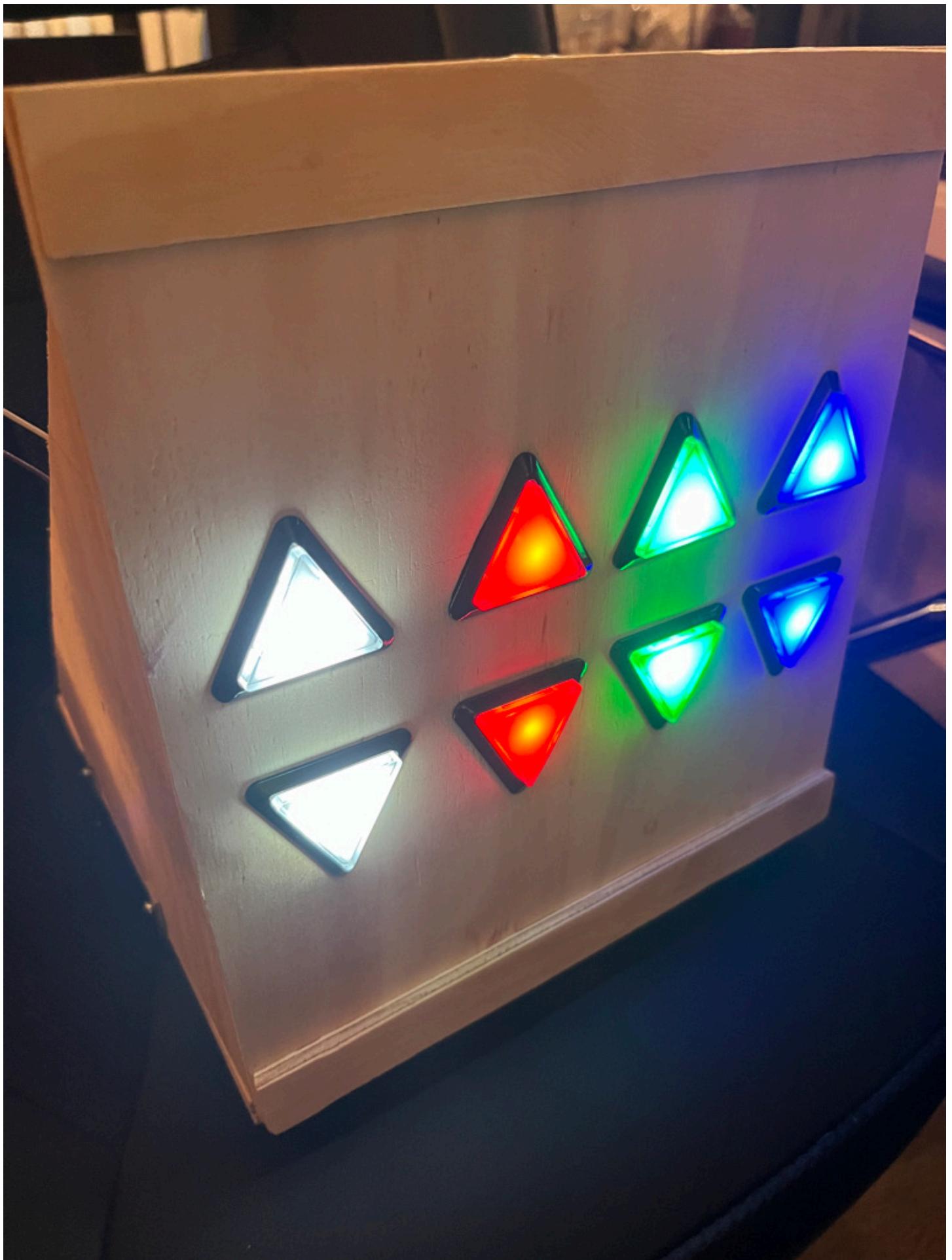




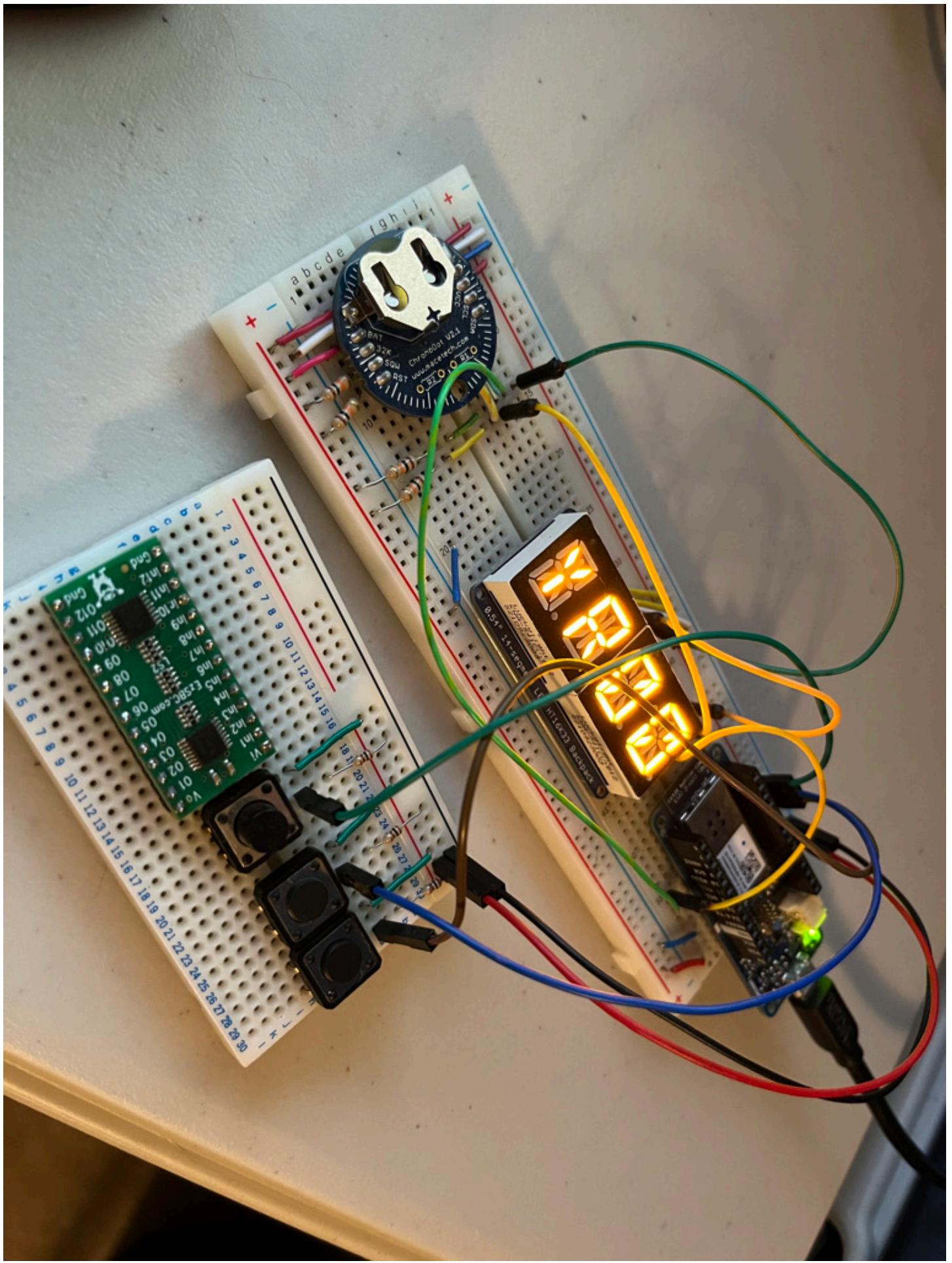








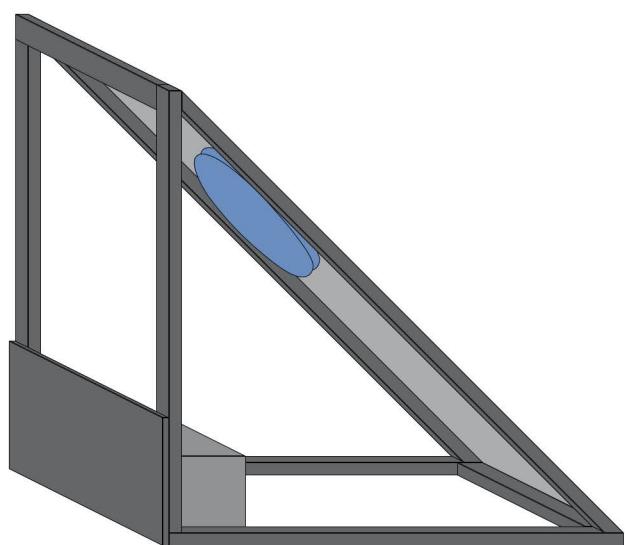




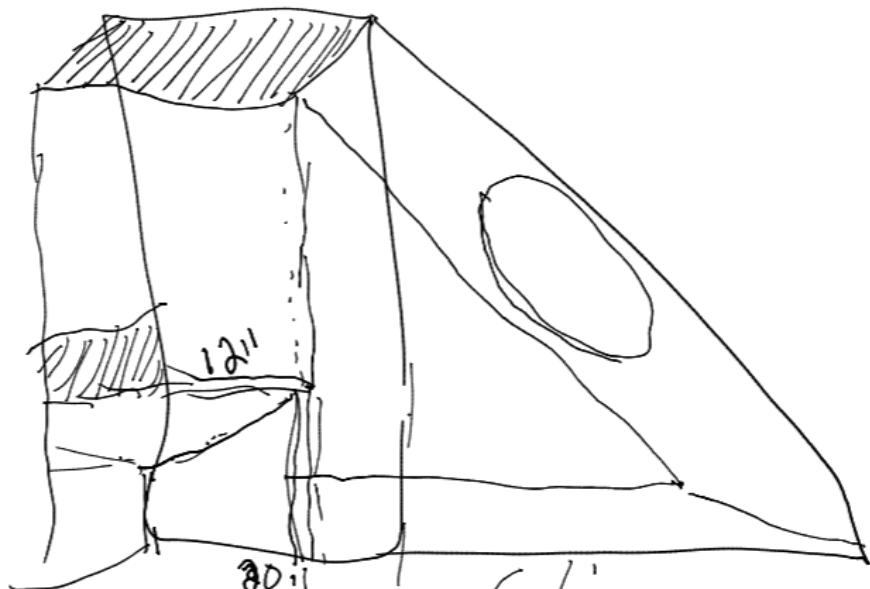




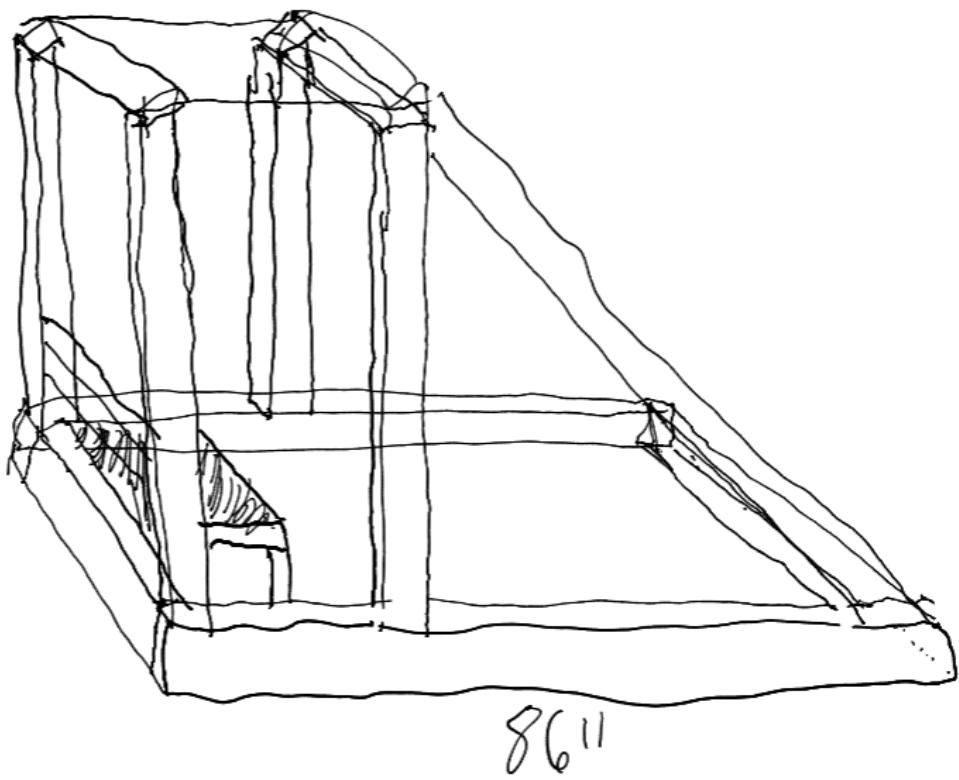
Structure







$$20 + 46''$$
$$86''/12 = 7.16'$$









Let's see

it!!