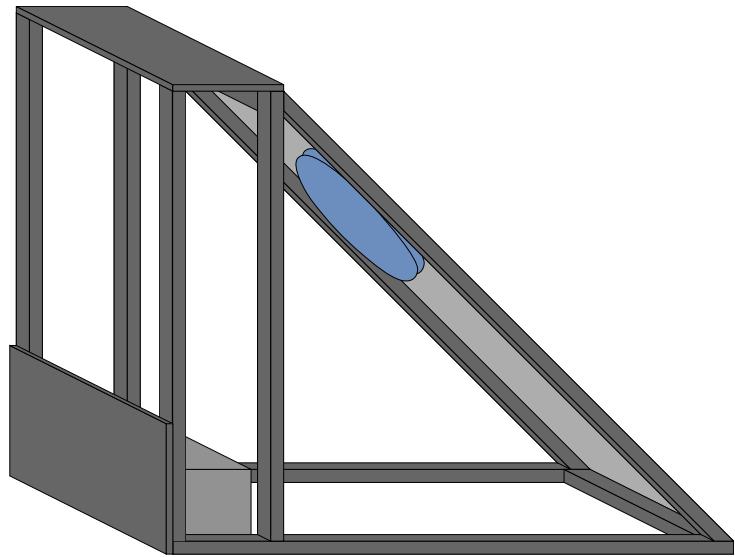


ColorClock

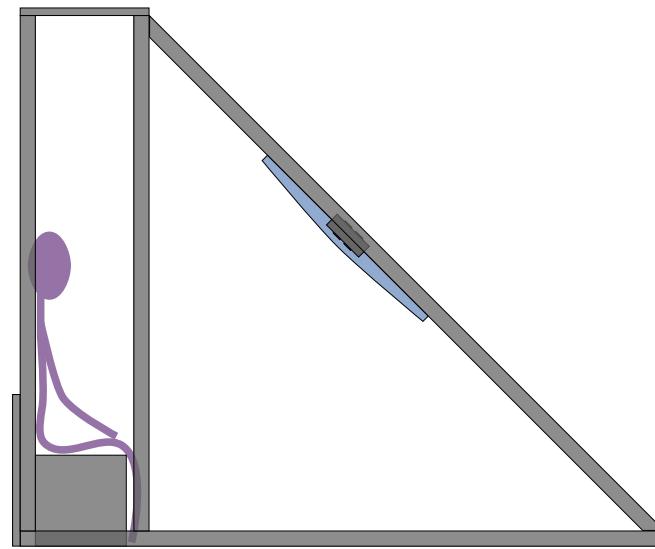
a project by

Lagomorphic Constructs

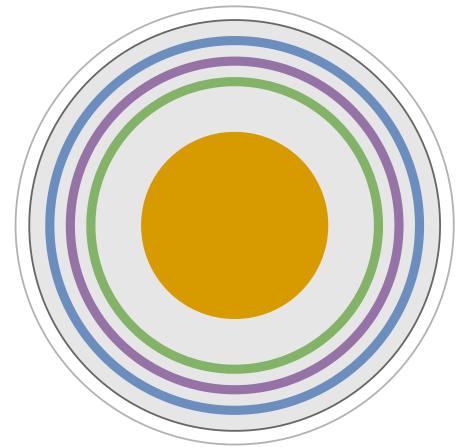
Introduction



ISOMETRIC VIEW



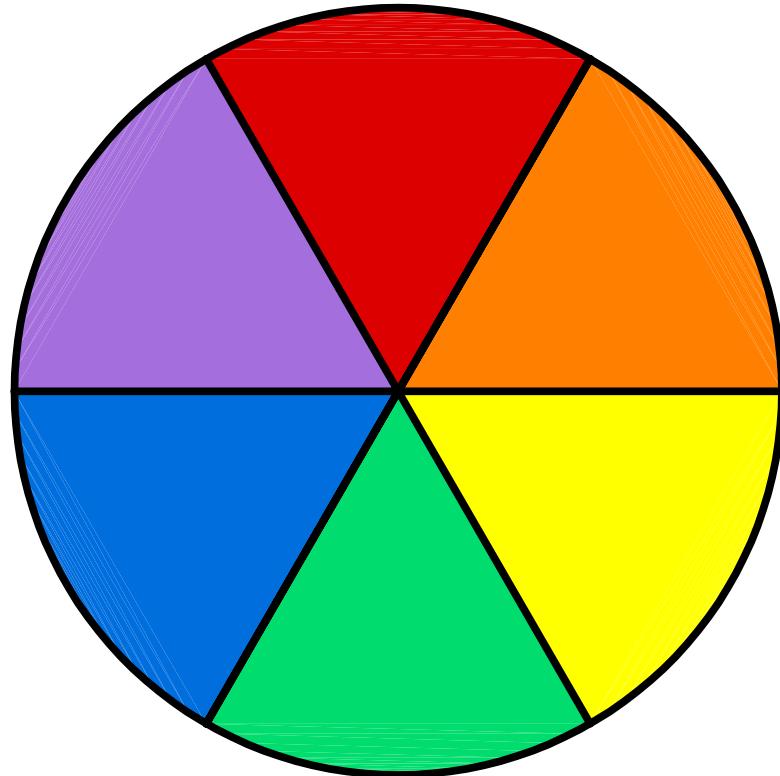
SIDE VIEW



LIGHT DISPLAY

Background

Pigment Primary Colors: Red, Yellow, Blue



Red

0%

Yellow

75%

Blue

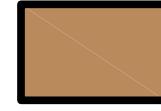
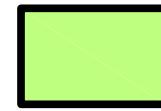
25%

Result

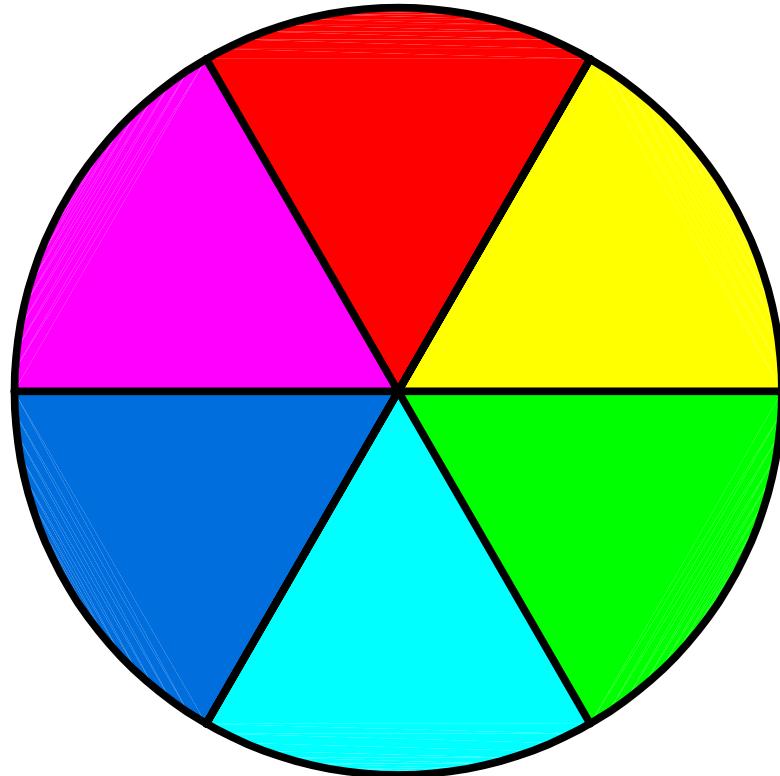
33%

33%

33%



Light Primary Colors: Red, Green, Blue



Red

Green

Blue

Result

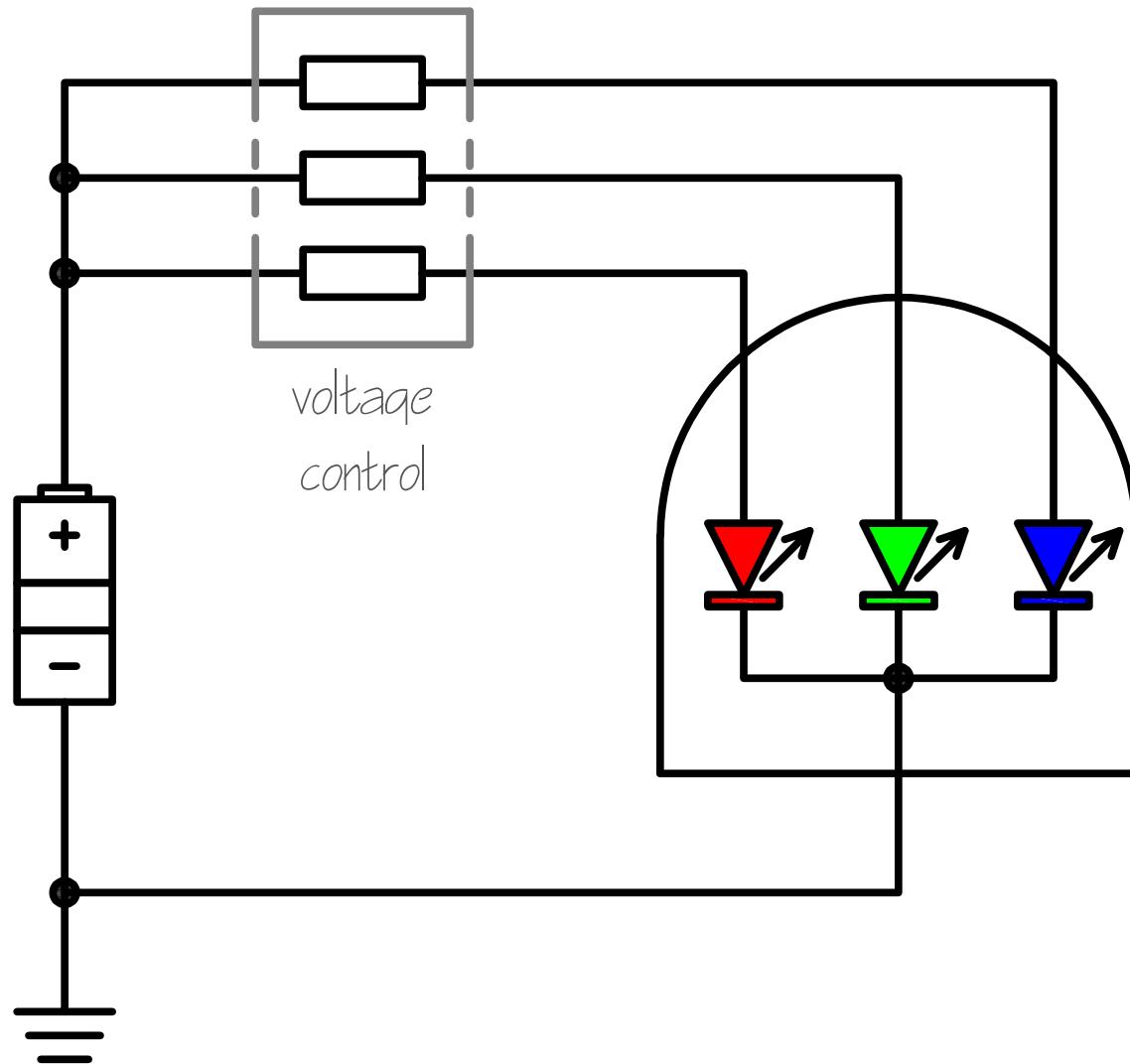
$$\begin{array}{c} \text{Red} \\ \boxed{50\%} \\ + \end{array} + \begin{array}{c} \text{Green} \\ \boxed{50\%} \\ + \end{array} + \begin{array}{c} \text{Blue} \\ \boxed{0\%} \\ = \end{array} \begin{array}{c} \text{Result} \\ \boxed{\text{Yellow}} \end{array}$$

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

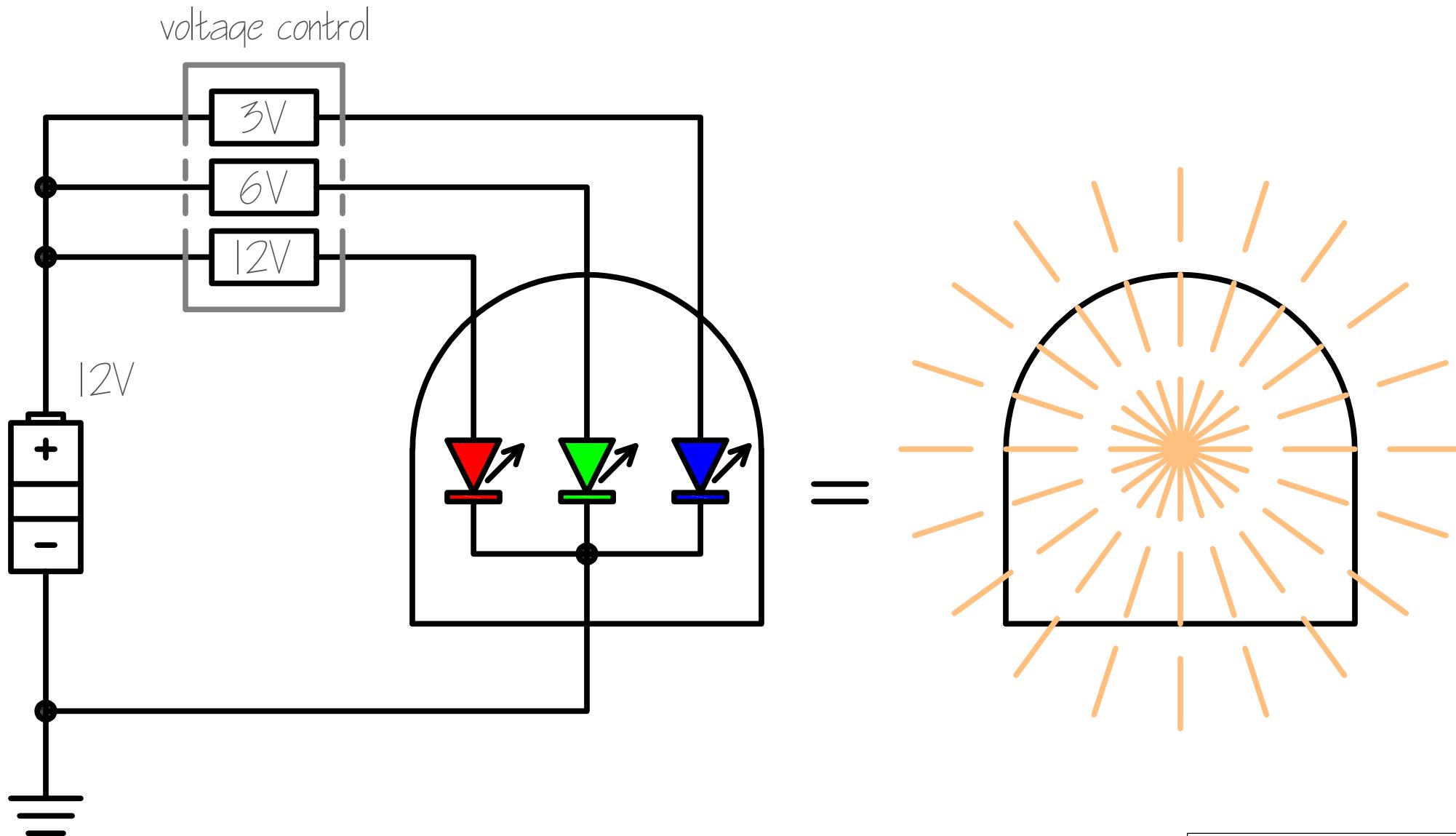
$$\begin{array}{c} \text{Red} \\ \boxed{60\%} \\ + \end{array} + \begin{array}{c} \text{Green} \\ \boxed{30\%} \\ + \end{array} + \begin{array}{c} \text{Blue} \\ \boxed{10\%} \\ = \end{array} \begin{array}{c} \text{Result} \\ \boxed{\text{Light Orange}} \end{array}$$

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

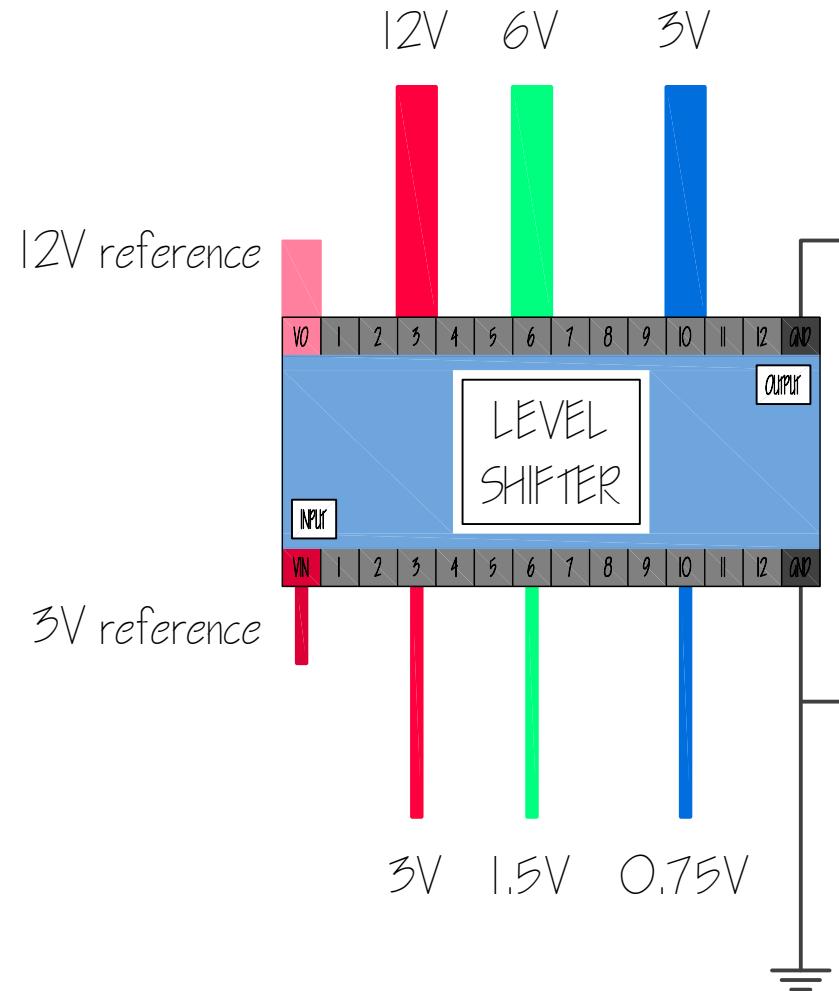
RGB LED Common Anode = Shared Ground



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

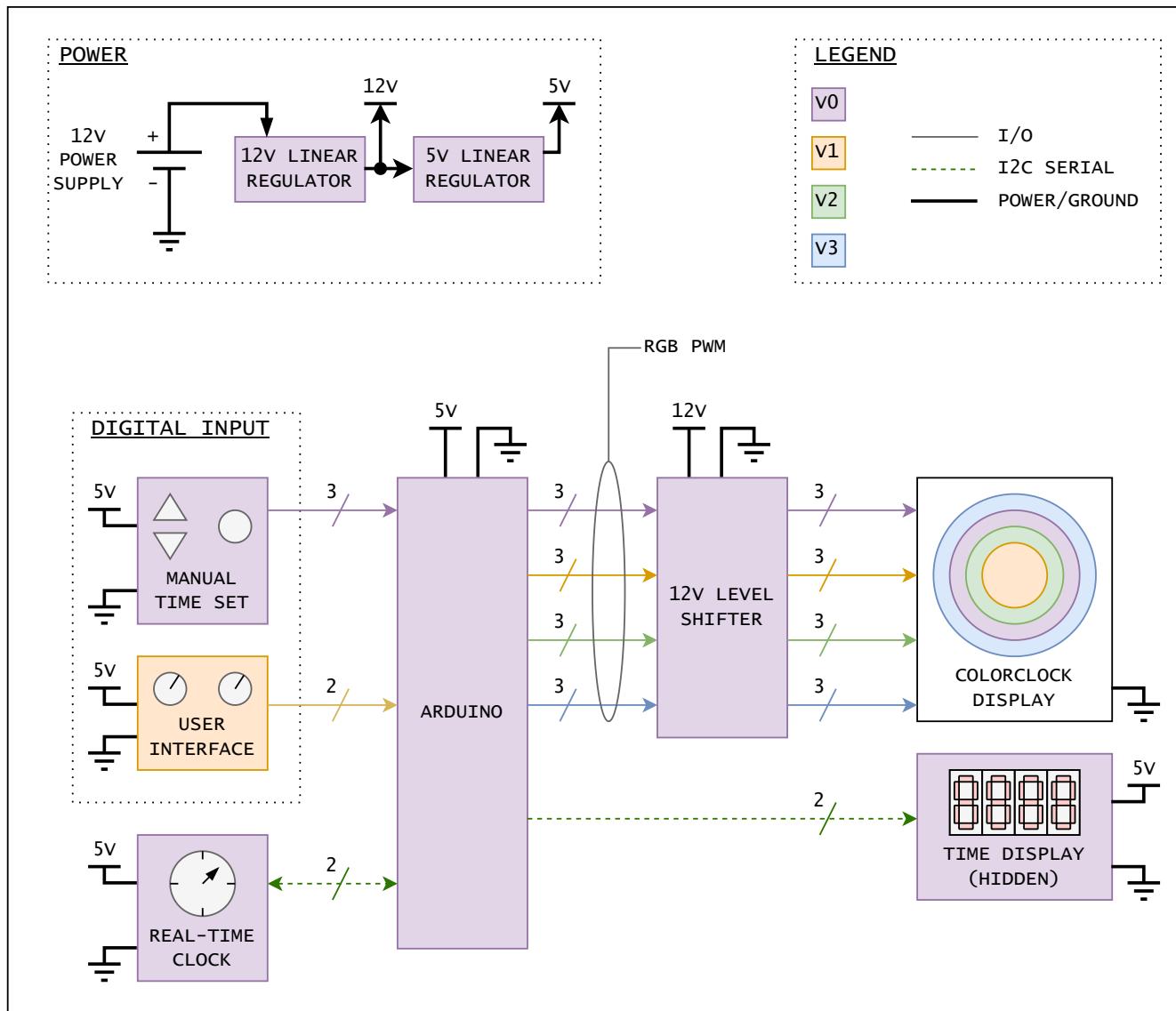


Level Shifter Modifies Output Voltage

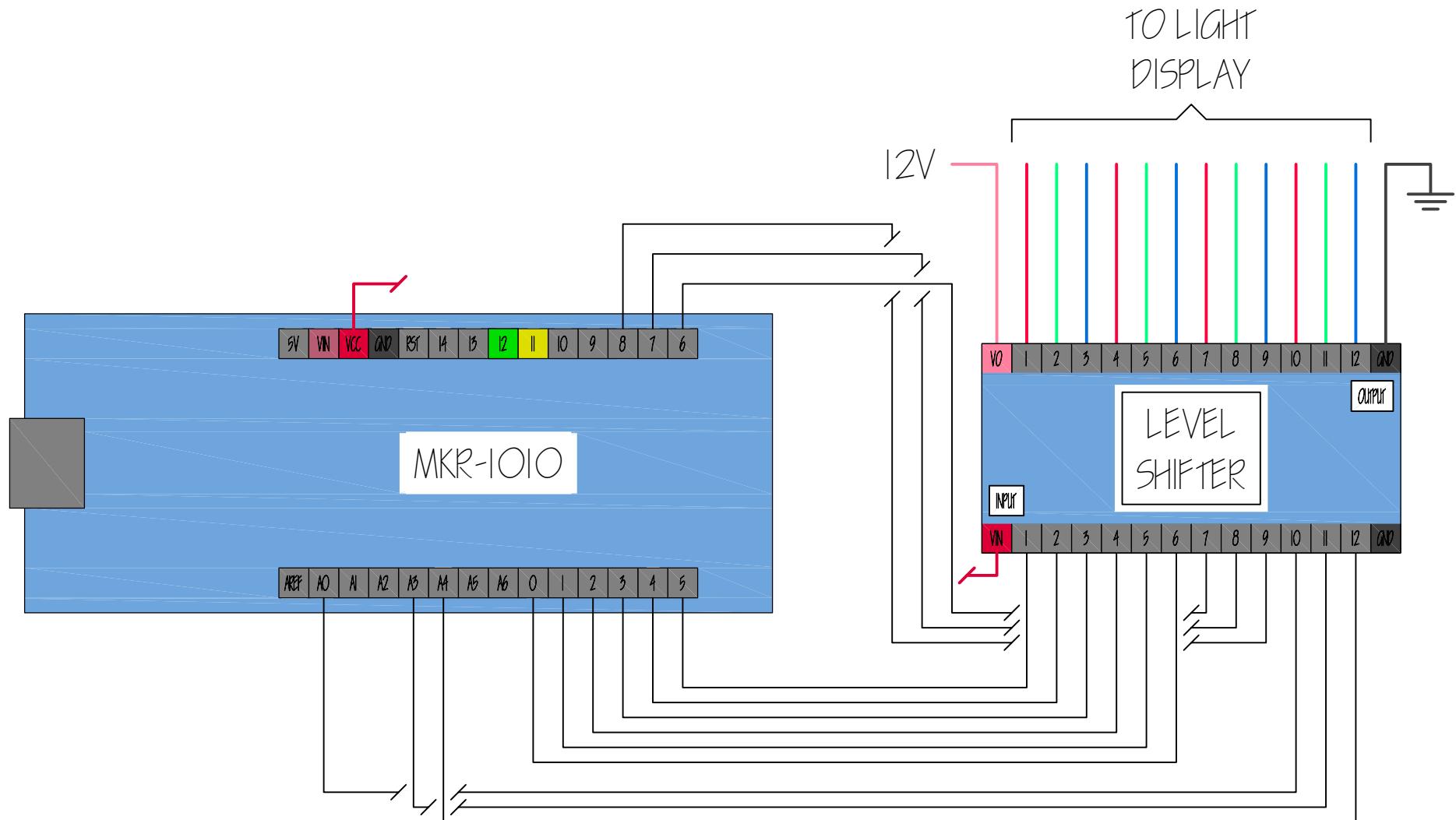


ColorClock

Hardware



Level Shifter Increases Arduino Analog Output



LEVEL SHIFTER CIRCUIT

LAGOMORPHIC CONSTRUCTS

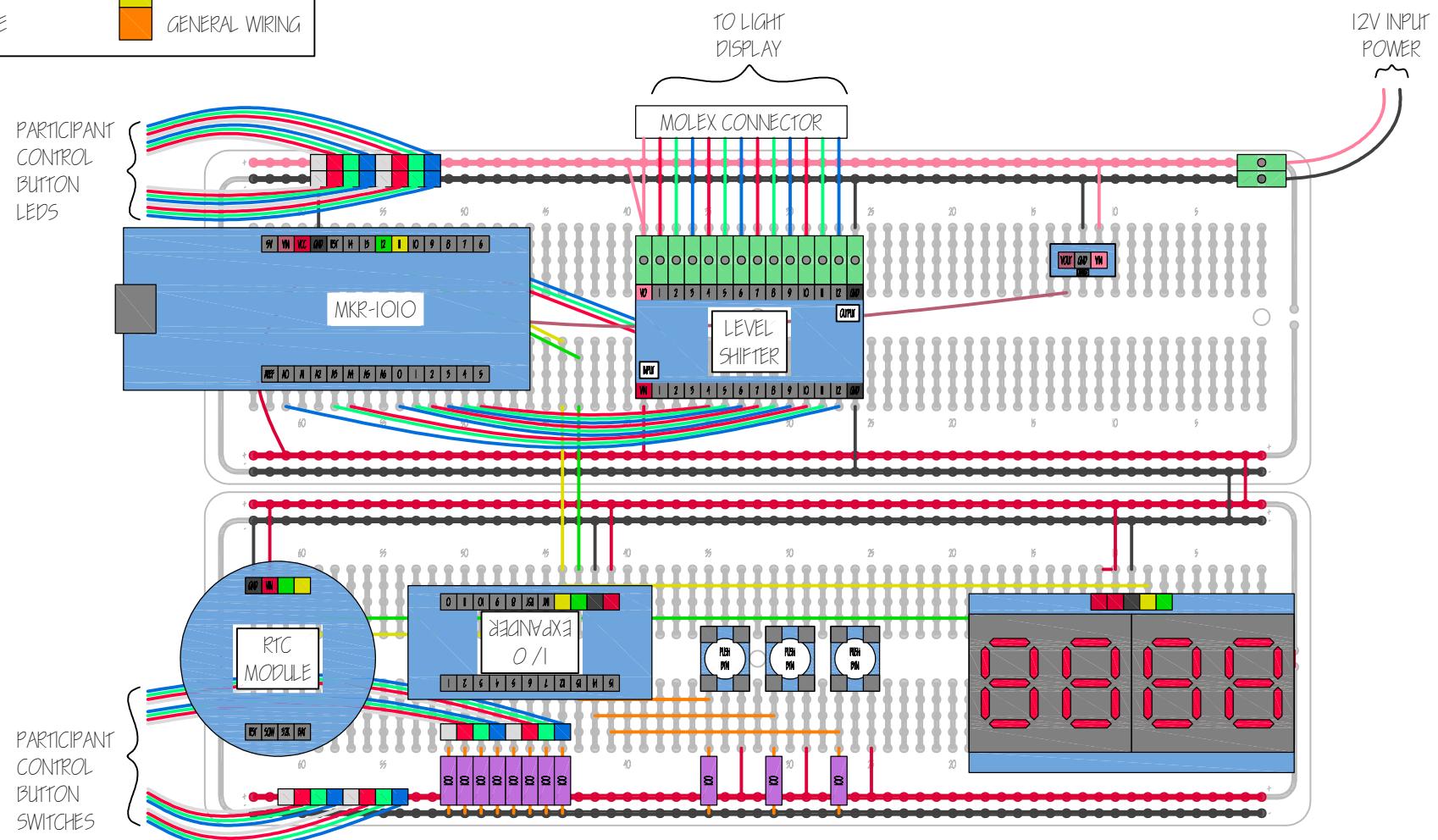
AUGUST 2024

REV -

LEGEND

	12V
	3.3V
	GND
	TERMINAL BLOCK
	GENERAL CONTACT
	RESISTOR
	MODULE

	RED LED
	GREEN LED
	BLUE LED
	WHITE LED
	I2C SCLK
	I2C SDA
	GENERAL WIRING



CIRCUIT BOARD LAYOUT

CIRCUIT BOARD LAYOUT

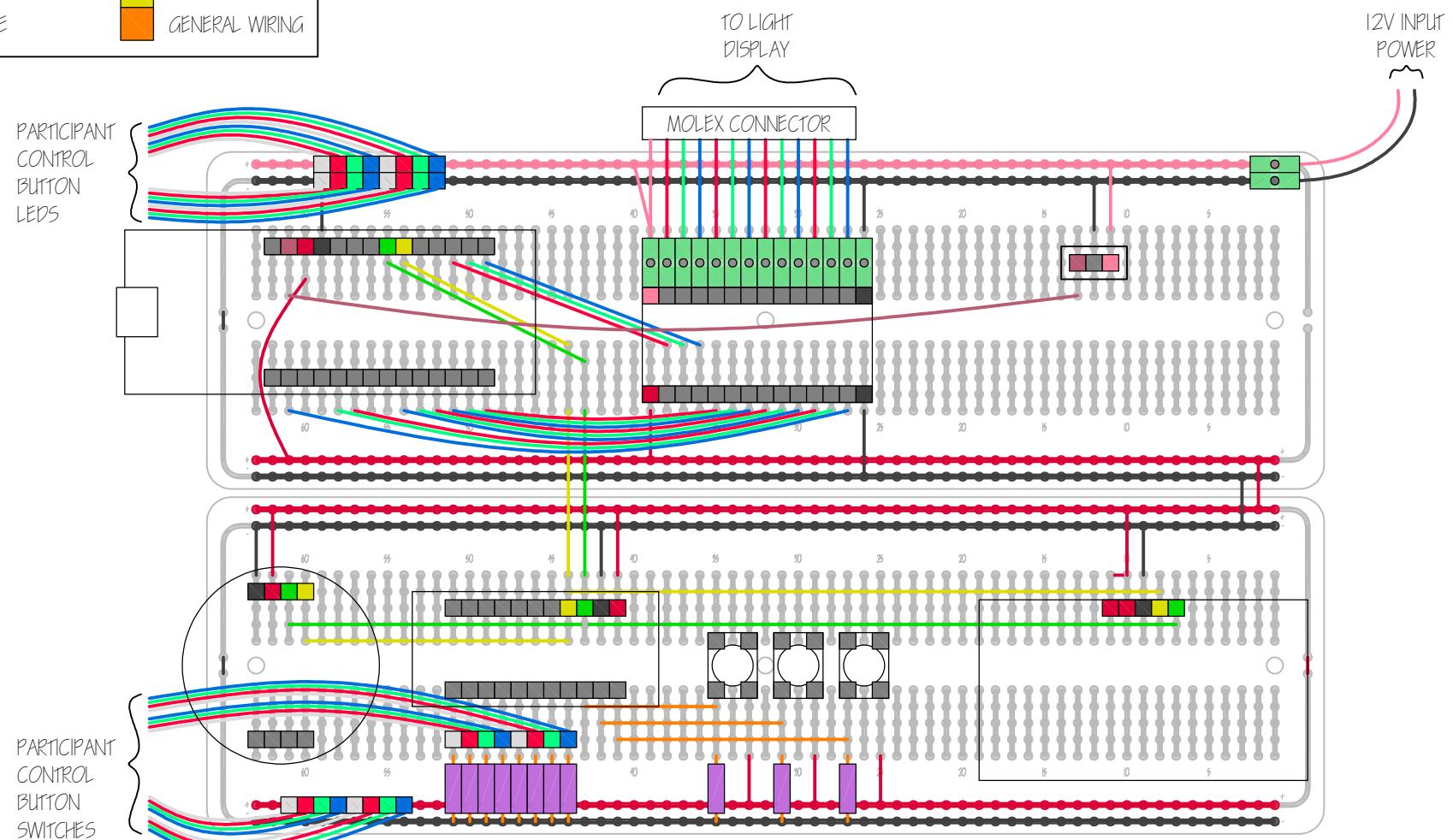
LAGOMORPHIC CONSTRUCTS

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



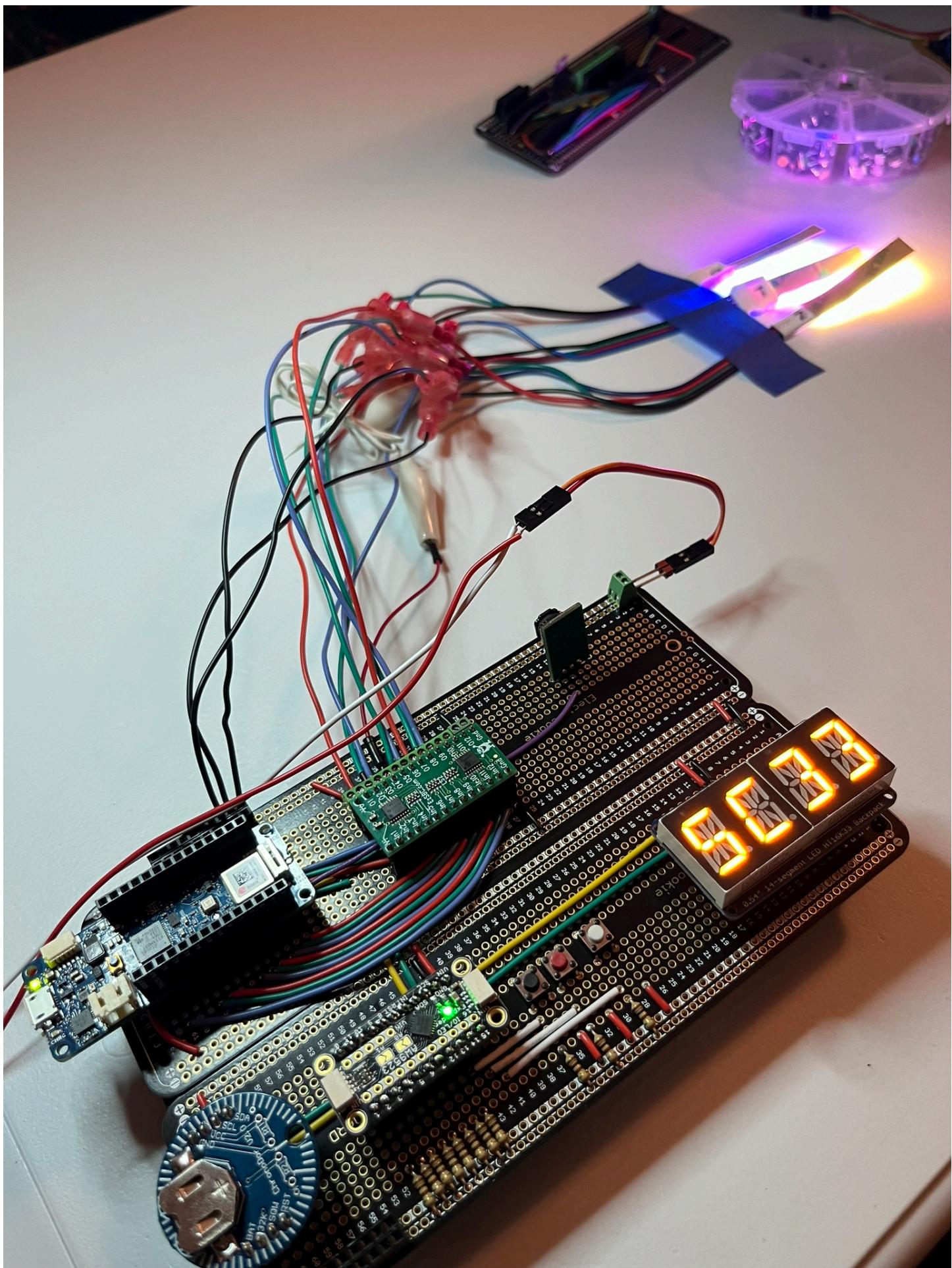
CIRCUIT BOARD WIRING

CIRCUIT BOARD WIRING

LAGOMORPHIC CONSTRUCTS

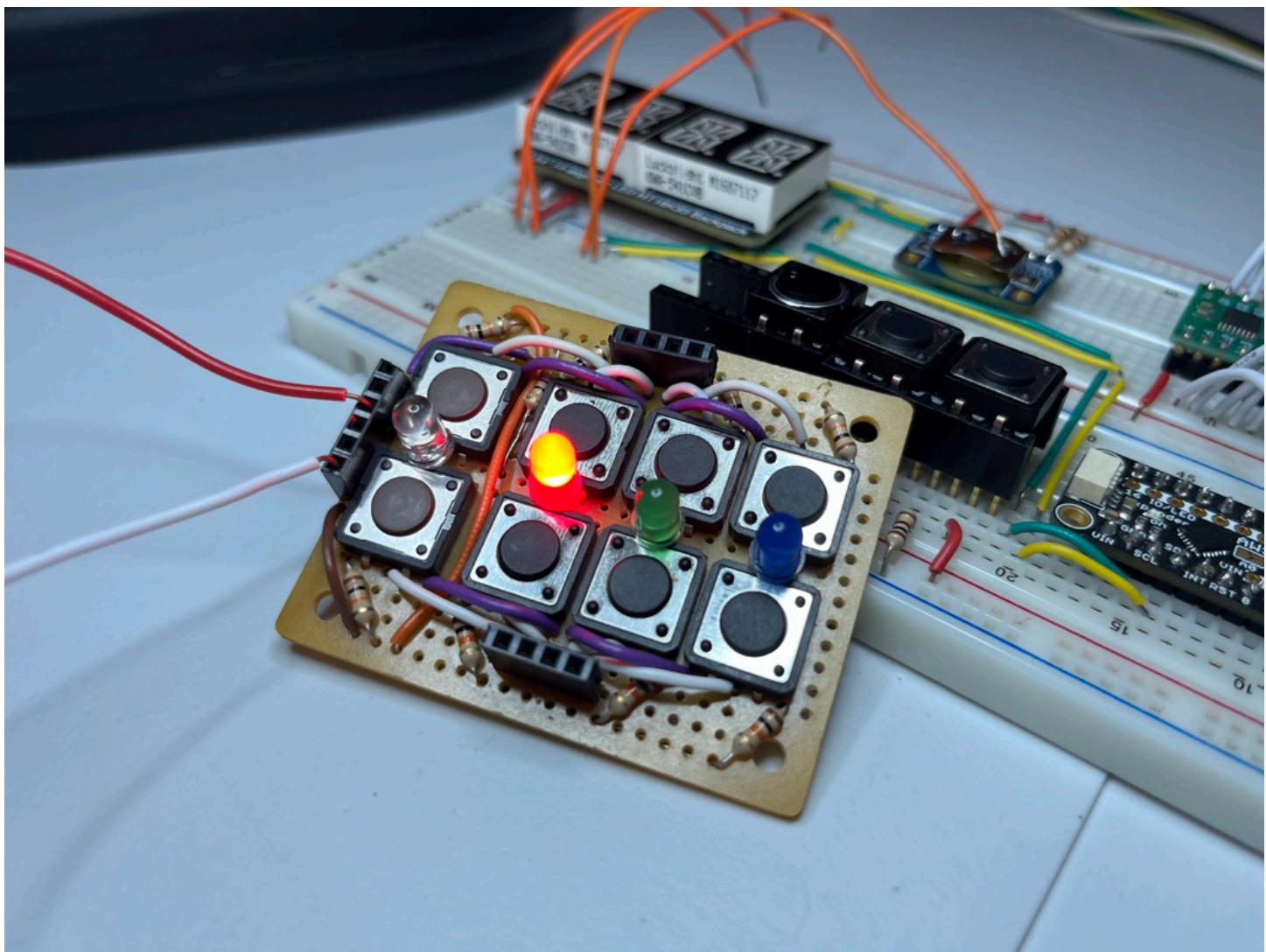
JULY 2024

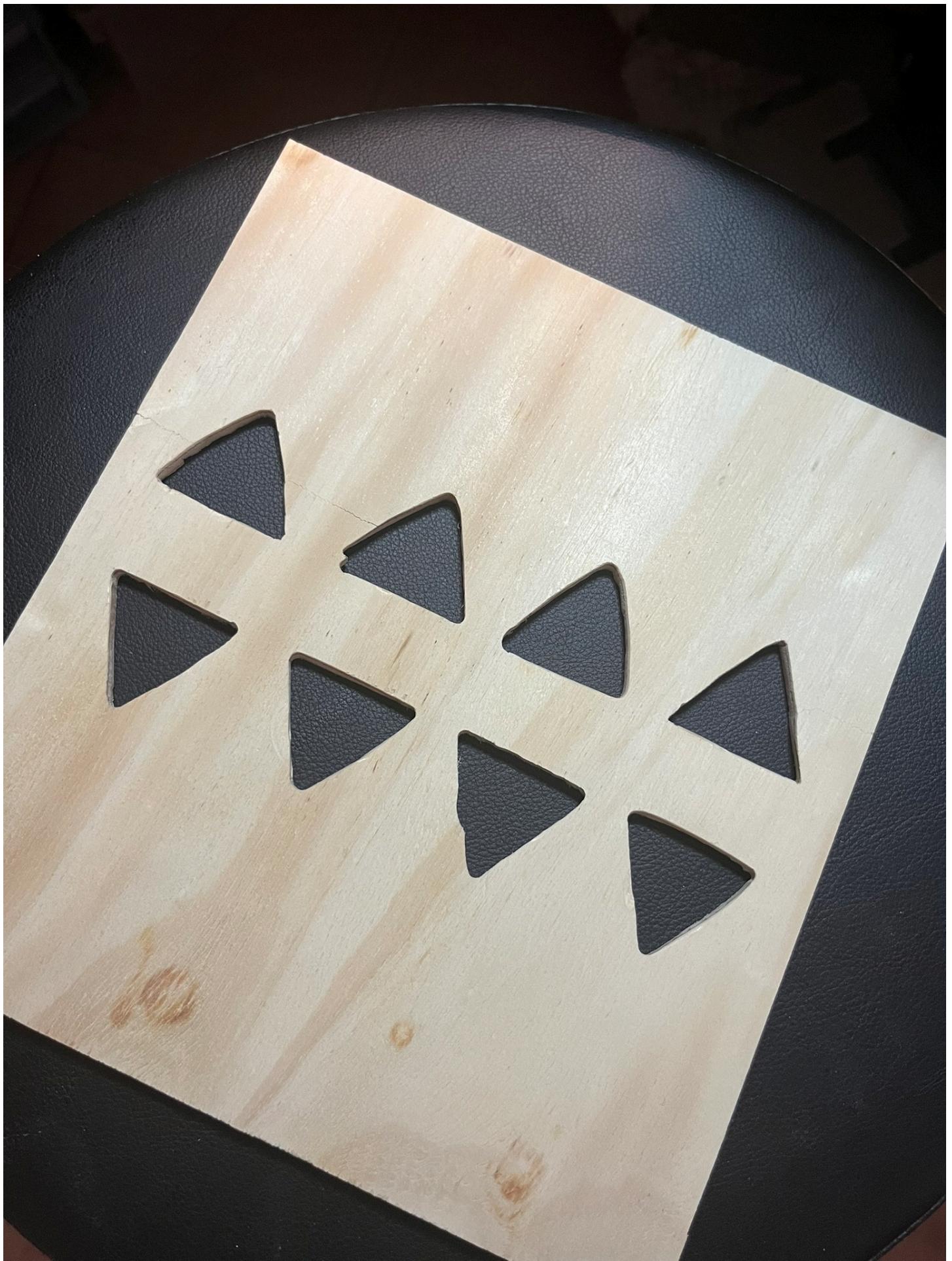
REV A



Participant

Control



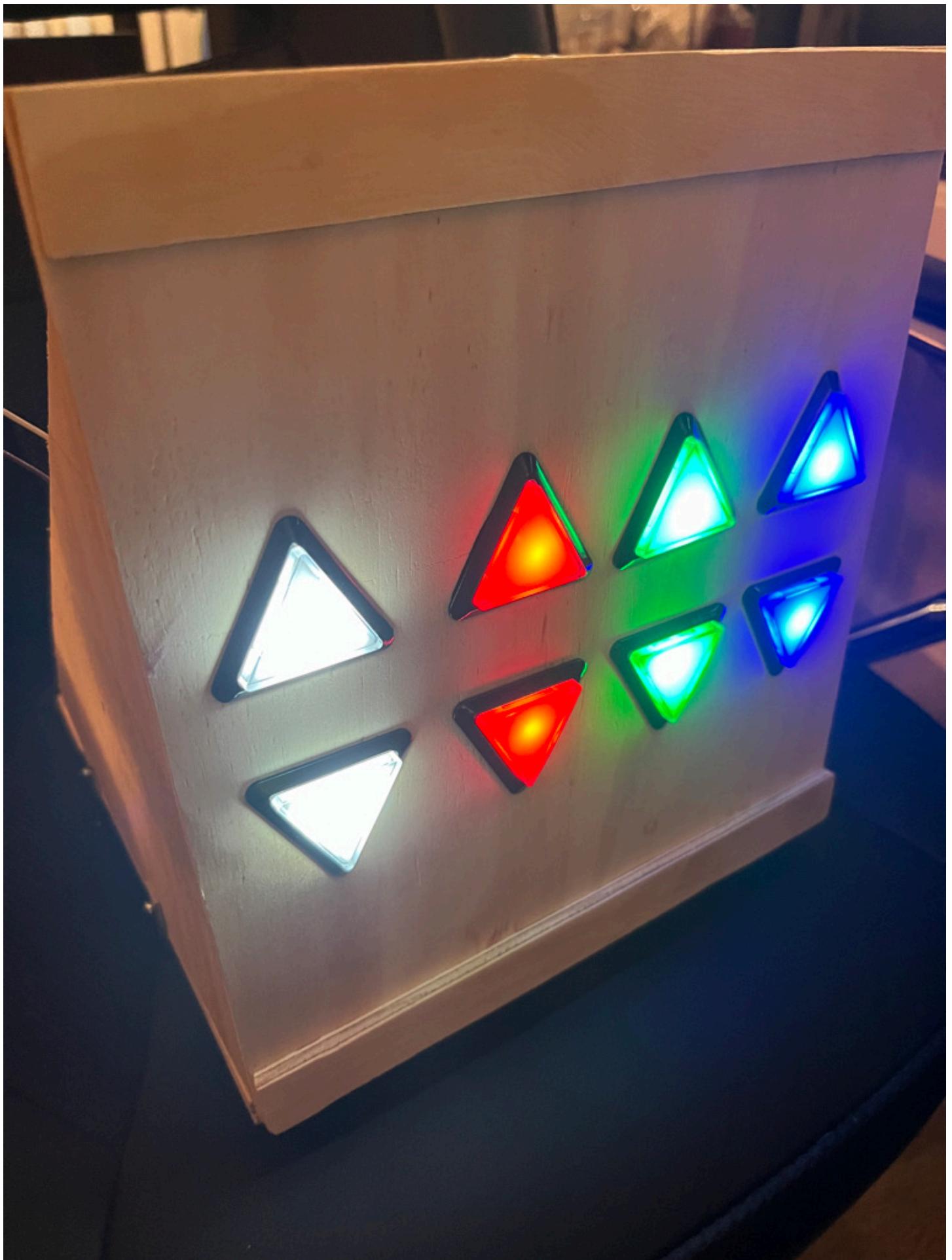










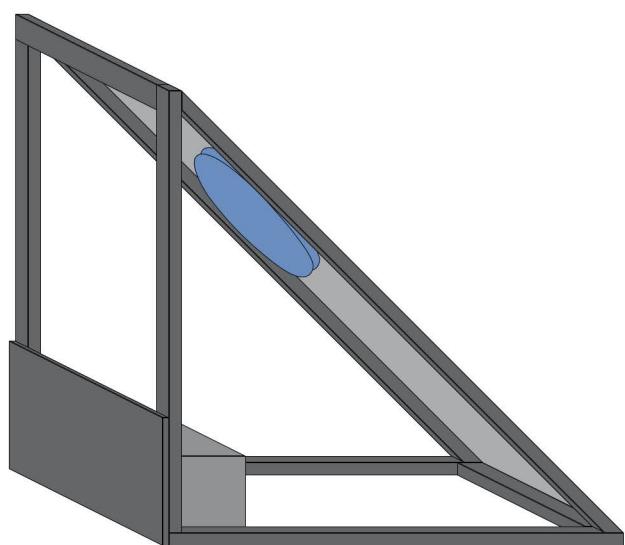




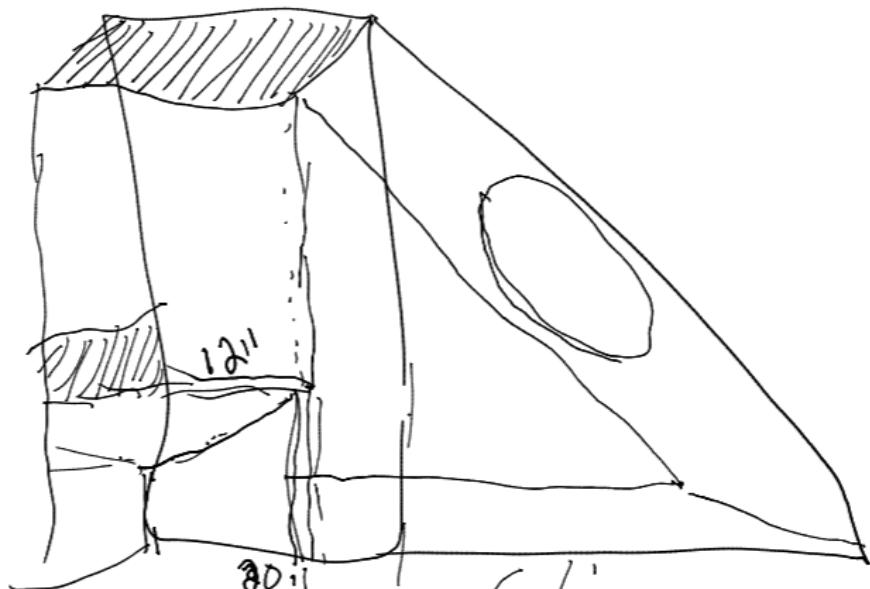




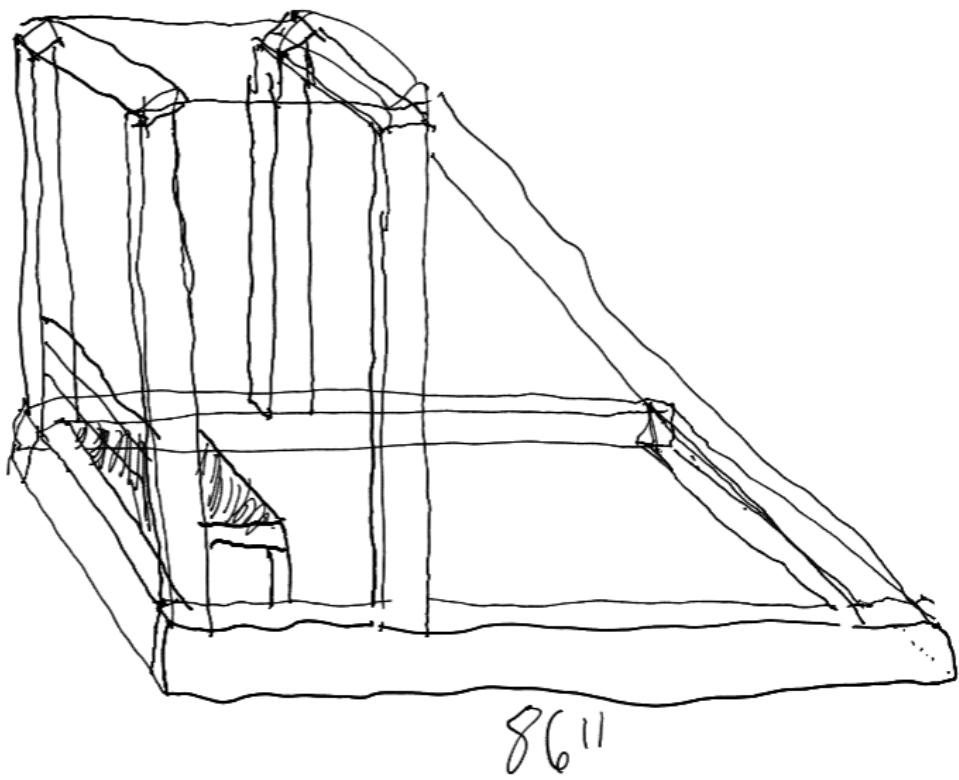
Structure







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









Let's see

it!!