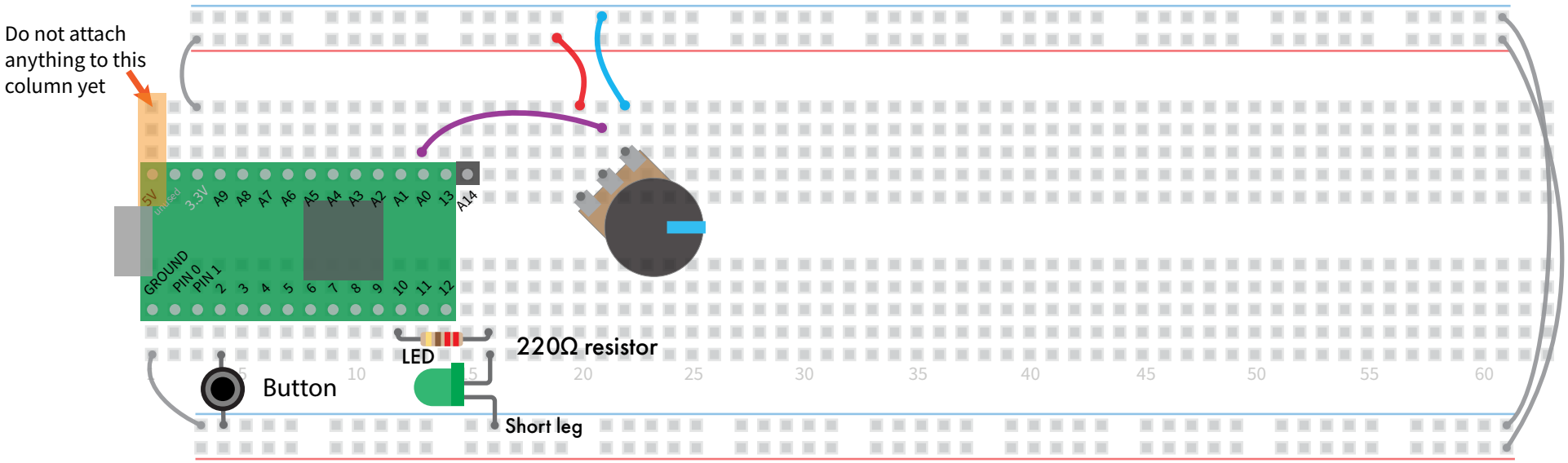
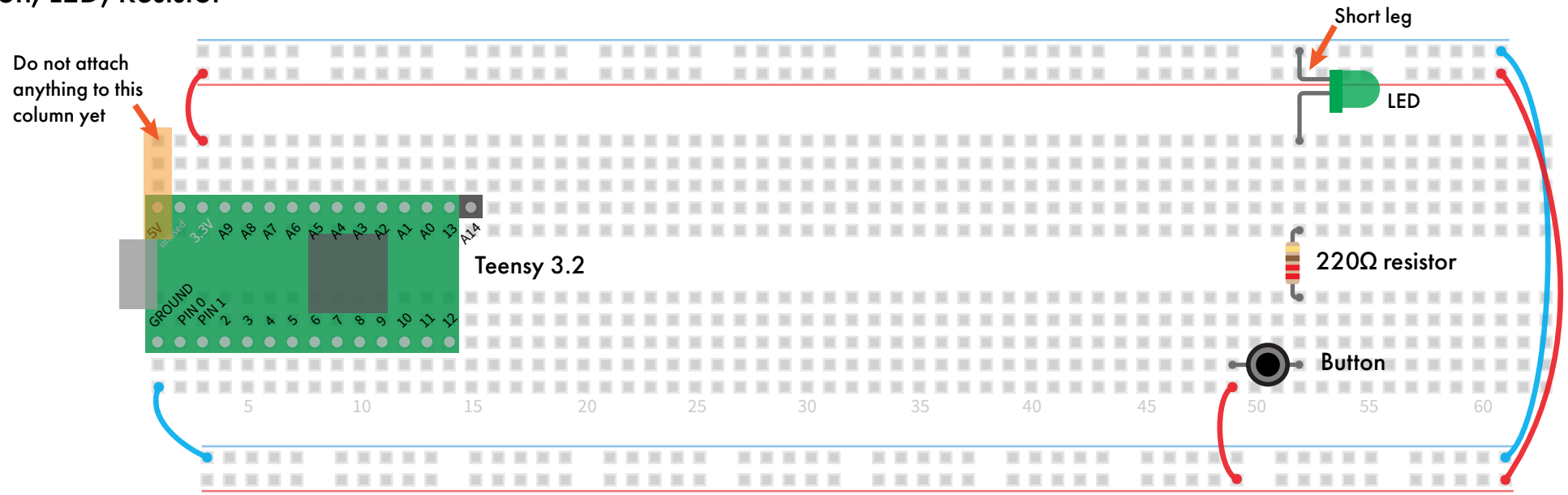
Setup 2
Analog and digital, in and out



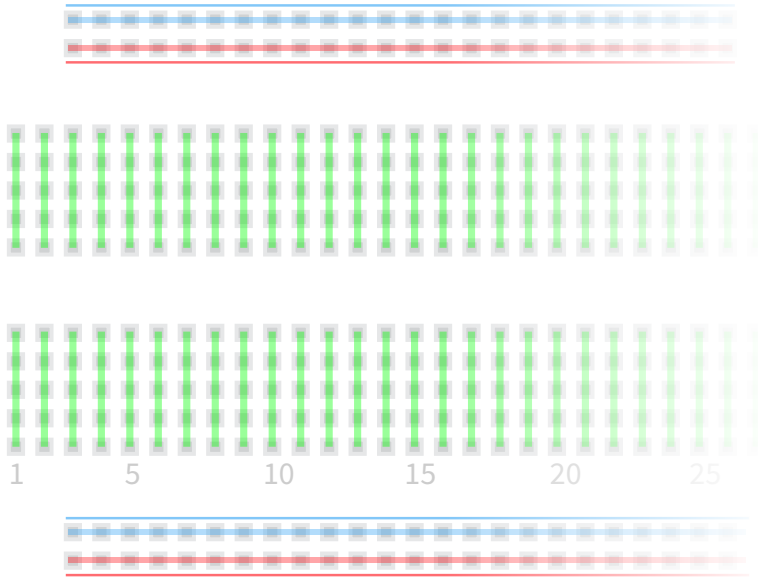
Grey jumpers are already installed.
I recommend using the green jumpers for the positive and ground connections of the pot.
The left pin of the pot connected to the red line for 3.3V. The middle goes to pin A0 of the Teensy. The right connects to blue aka ground.

Setup 1
Button, LED, Resistor



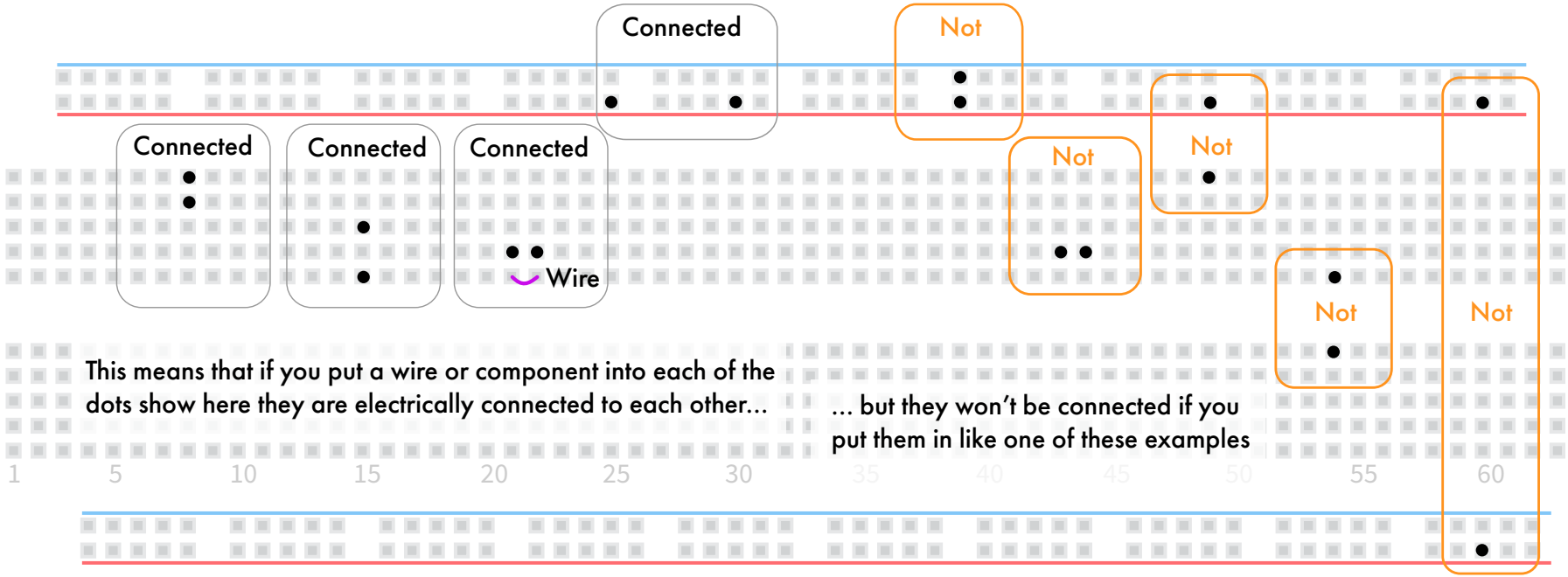
Here we're just using the Teensy to deliver power to the breadboard.
USB supplies 5 Volts but the Teensy can old handle 3.3V so that's what well be using.

Don't worry about putting the comonents in the exact postions shown here. It's only imporant that the connections are correct.
I recommend using the small green wires for the short connections. Use any sized jumper wires work for you for anything else.
The colors just here indicate what they are connected to. 3.3V for the red bus line, ground for the blue bus line
The button can go neither direction.
There are two resistors in your kit. Use the smaller one.
The LED has a long and short leg and needs to be installed with the shorter one will go in the blue line at the top



Breadboards make it easy to assemble electronic circuits without soldering

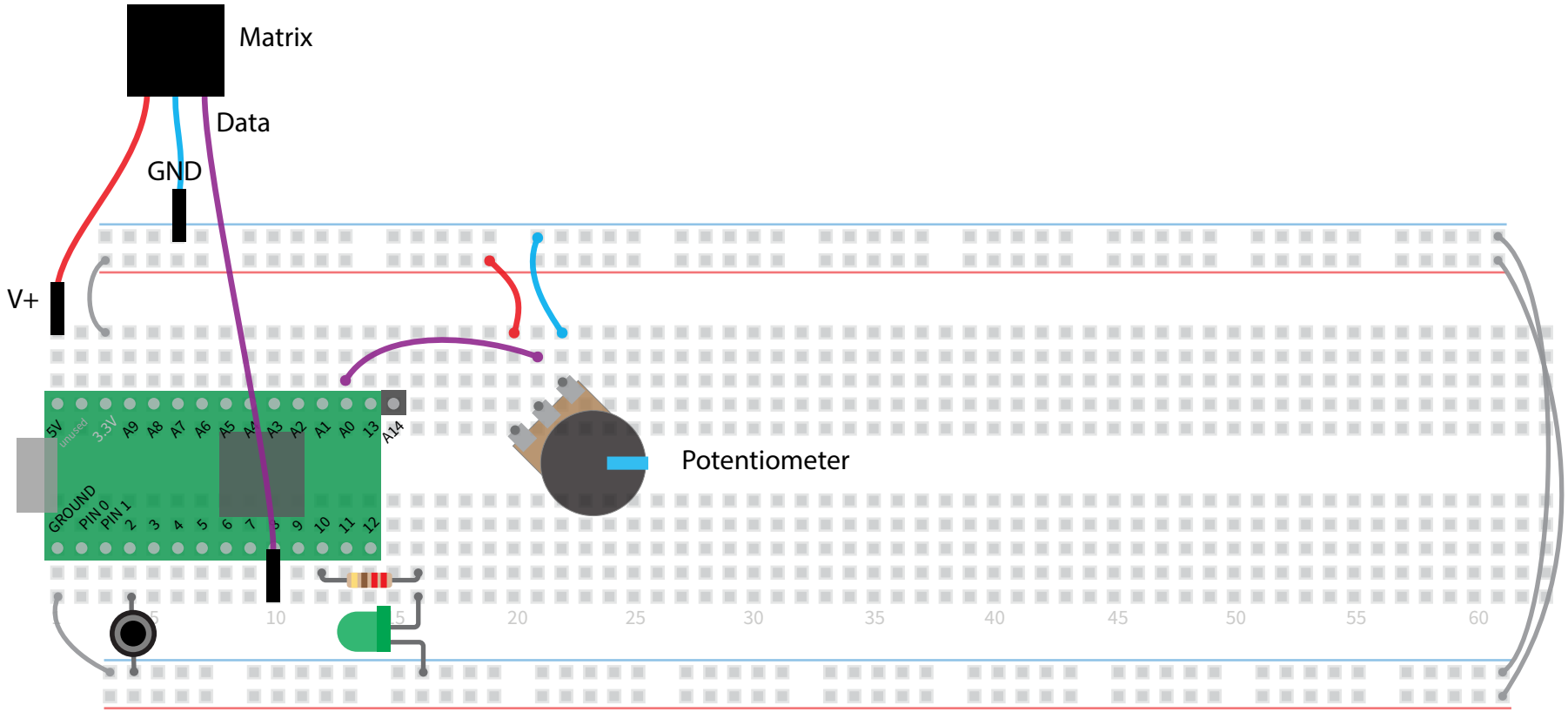
The holes on a breadboard are connected as show with the colored lines.
The vertical strips on either side of the central gap are connected in groups of five.
The horizontal red and blue "bus" lines are connected all the way across the board.



This means that if you put a wire or component into each of the dots show here they are electrically connected to each other...

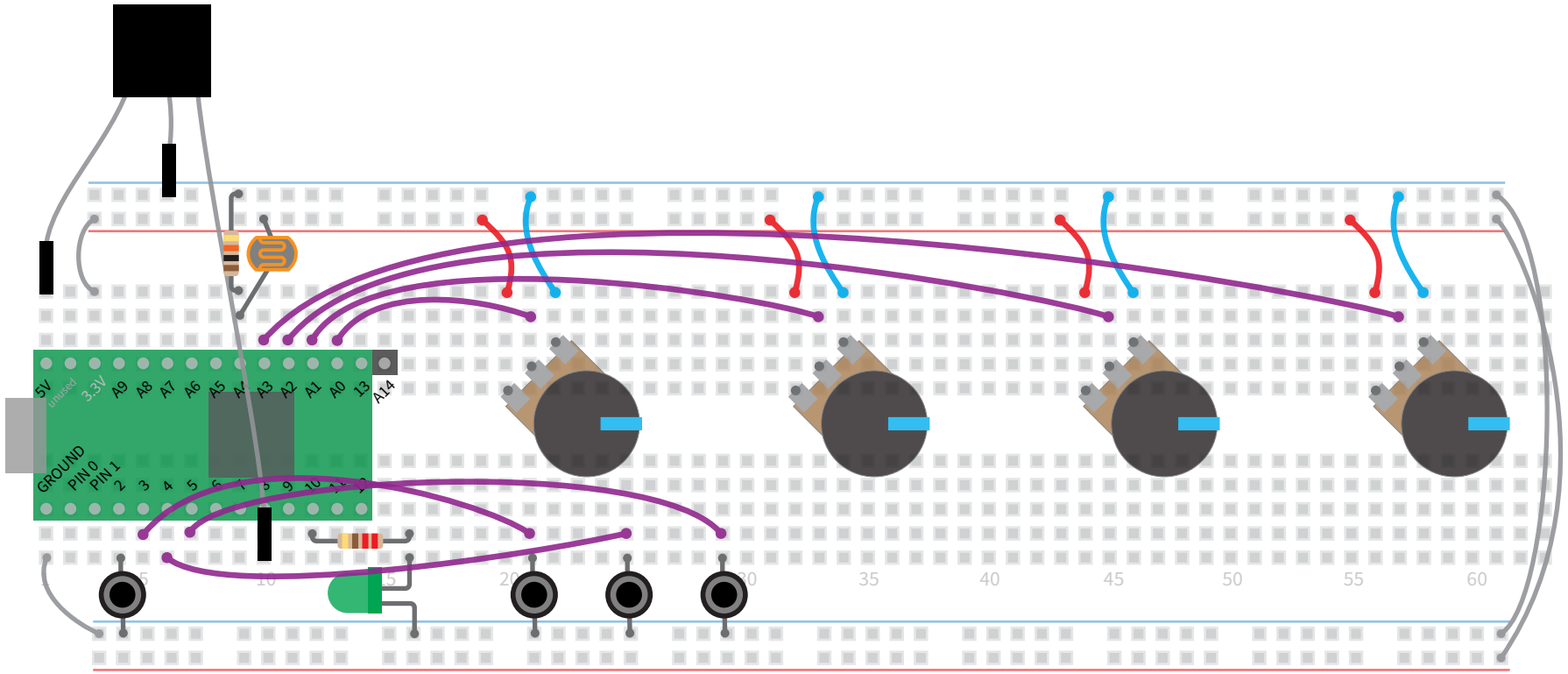
... but they won't be connected if you put them in like one of these examples

Setup 3
LED matrix



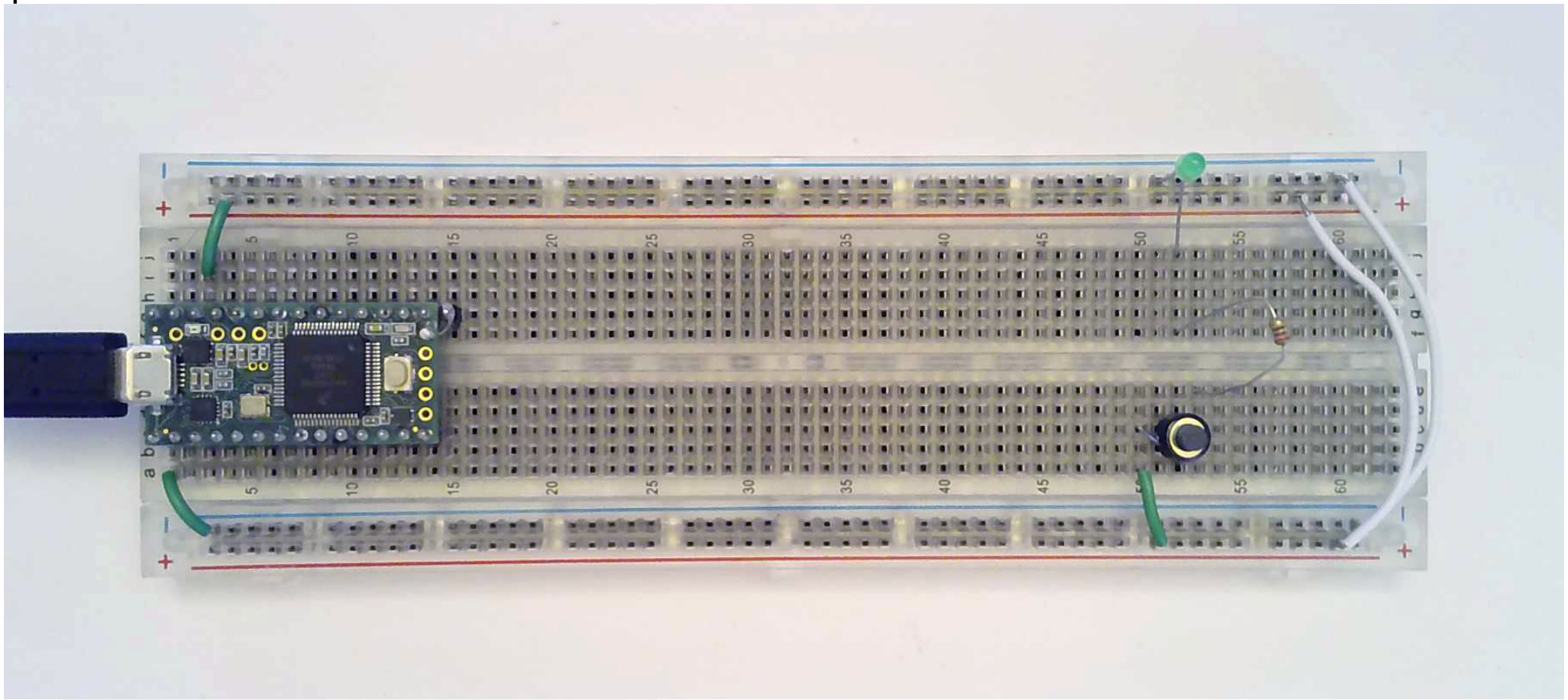
Use the long jumpers with black plastic ends to connect the LED matrix to the breadboard.
The socket side connects to the matrix while the pins go in the breadboard.
There are several types of panels with slightly different markings.
Data should go to “Data in” or “LED in”
Ground is V- or GND
Power is V+ or 5V. It connects to the top right corner of the Teensy.
Don’t worry if you have it hooked up incorrectly, it won’t blow up.

Setup 4
More controls



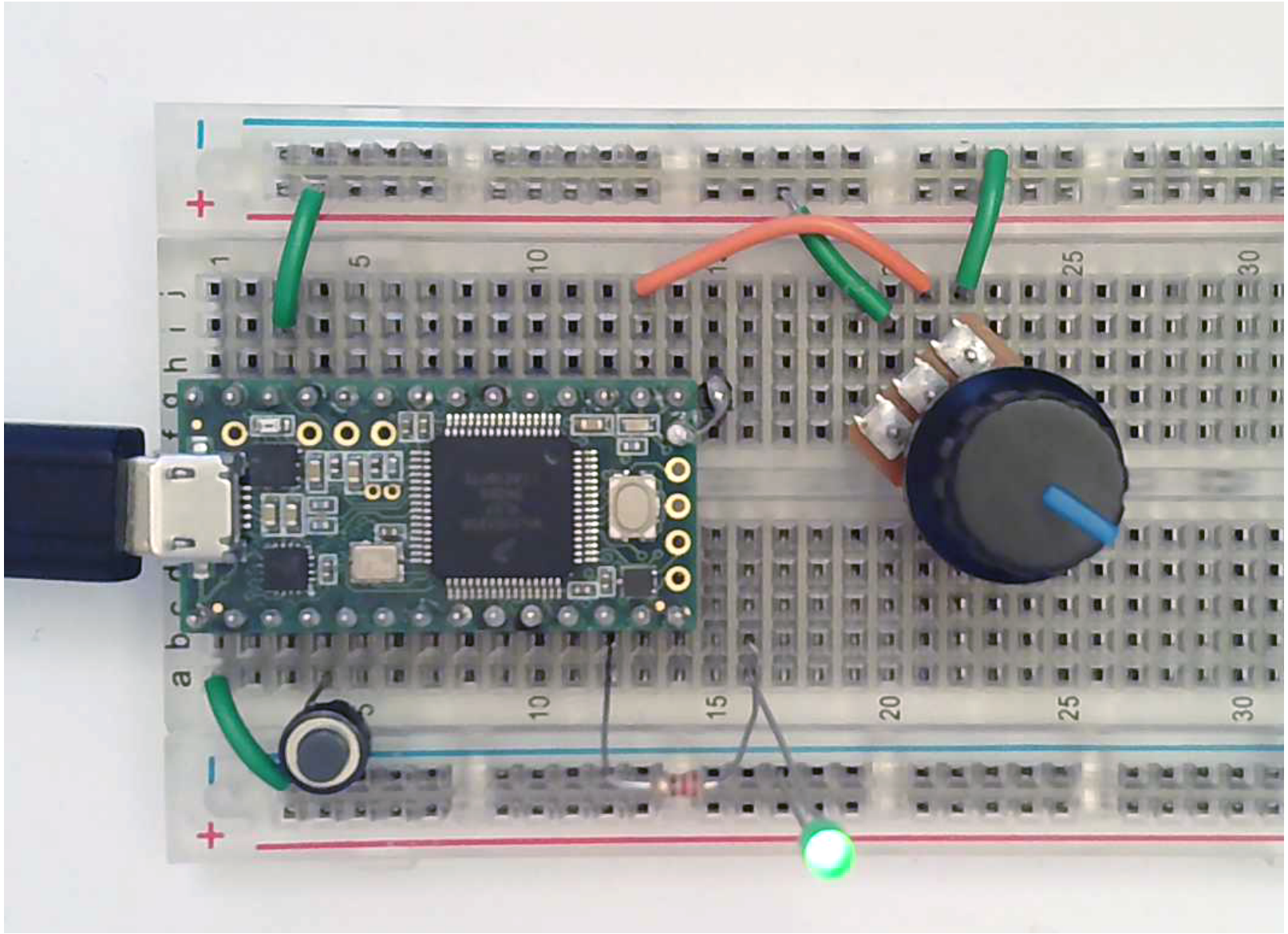
The 10k resistor is the larger one.
The photocell and resitors can be insalled in either direction.
The buttons can be connected to any pins.

Setup 1 continued

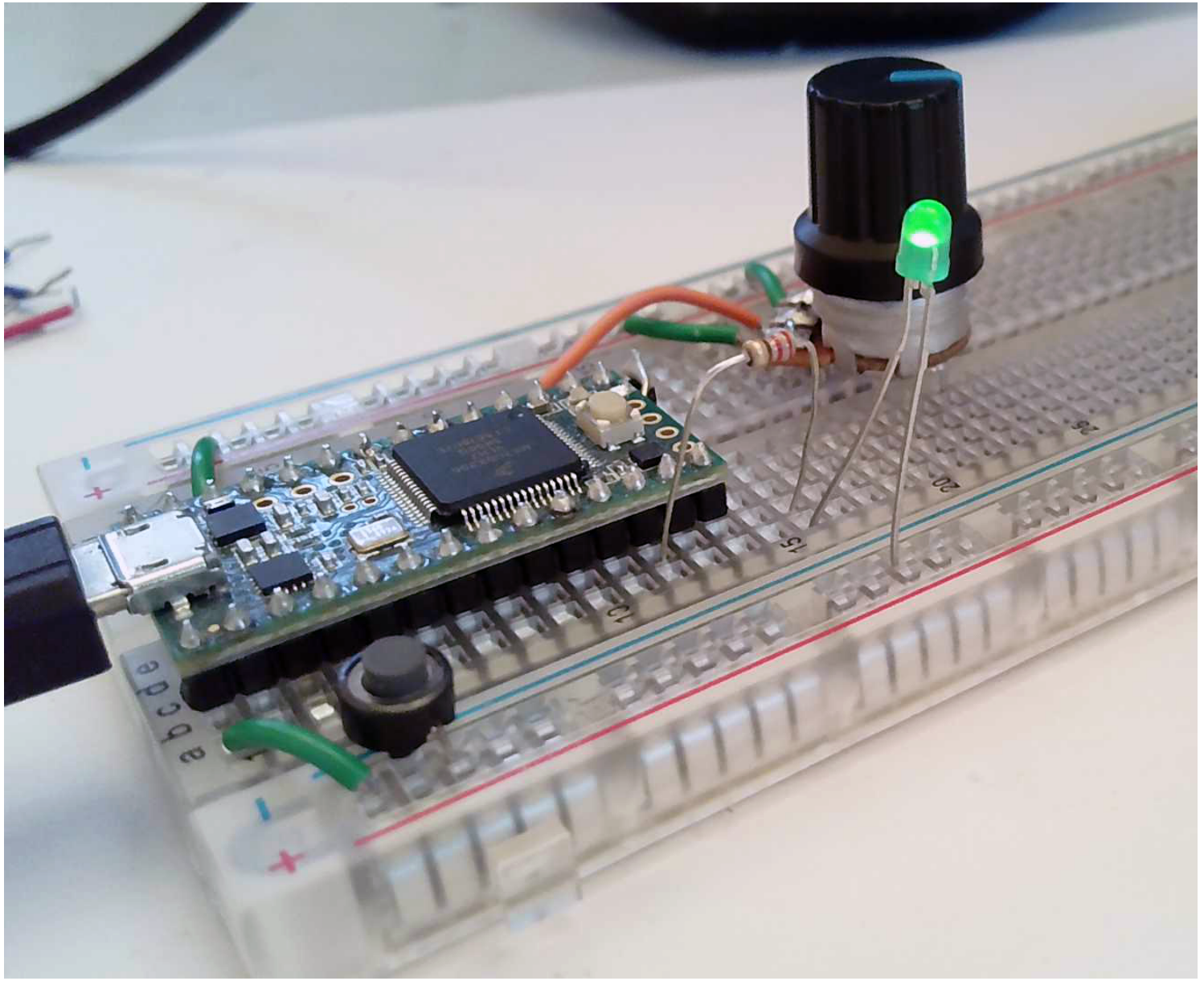


Resistors values are indicated with the colored lines, not their size.
The smaller one can handle less wattage than the larger one but we don't need to worry about that here.
Resistors limit the flow of electricity. Without it the LED would get too much and burn out quickly.

Setup 2 Continued



Setup 2 Continued



Setup 1 continued