

do you like to blink?

for blinkers!

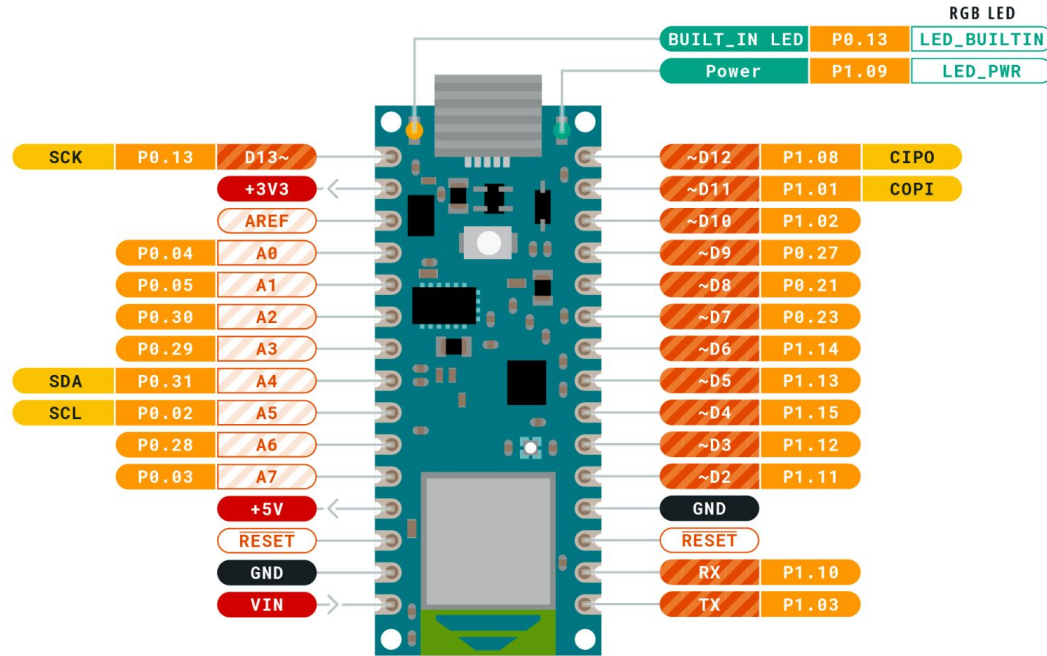
stupid arduino

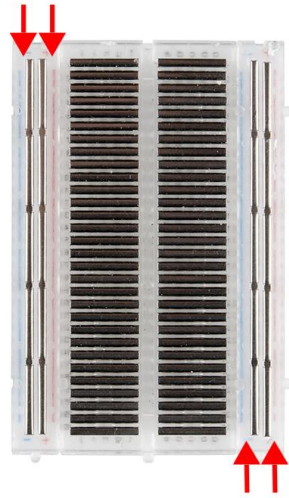
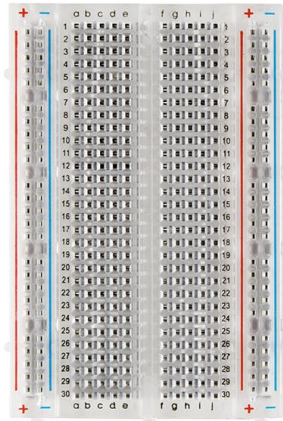
Jess Shen and Priyanka Makin

This site is important. Go there:

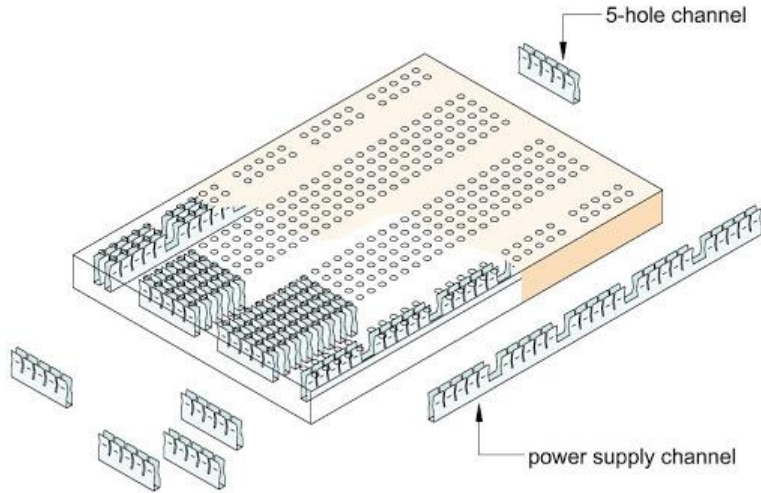
[https://github.com/makin-stuff/Stupid Arduino for Blinkers](https://github.com/makin-stuff/Stupid-Arduino-for-Blinkers)

Get to know your Arduino Nano 33 BLE!





We will be making circuits on a breadboard. To understand breadboards better, look at this broken one below.

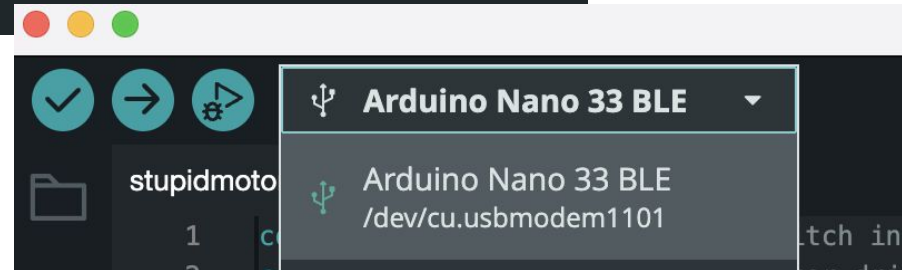
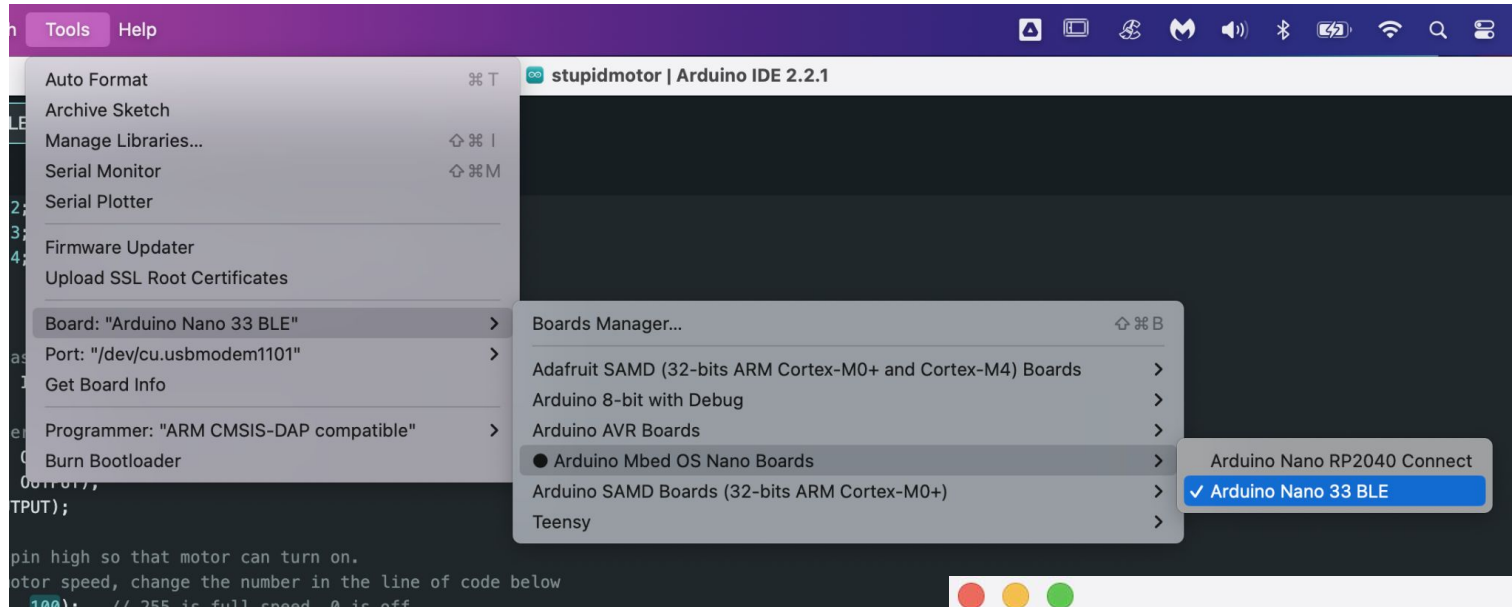


Before we move on, did you download this thing?!

Go to <https://www.arduino.cc/en/software> and download Arduino IDE for your operating system



Select your board and port



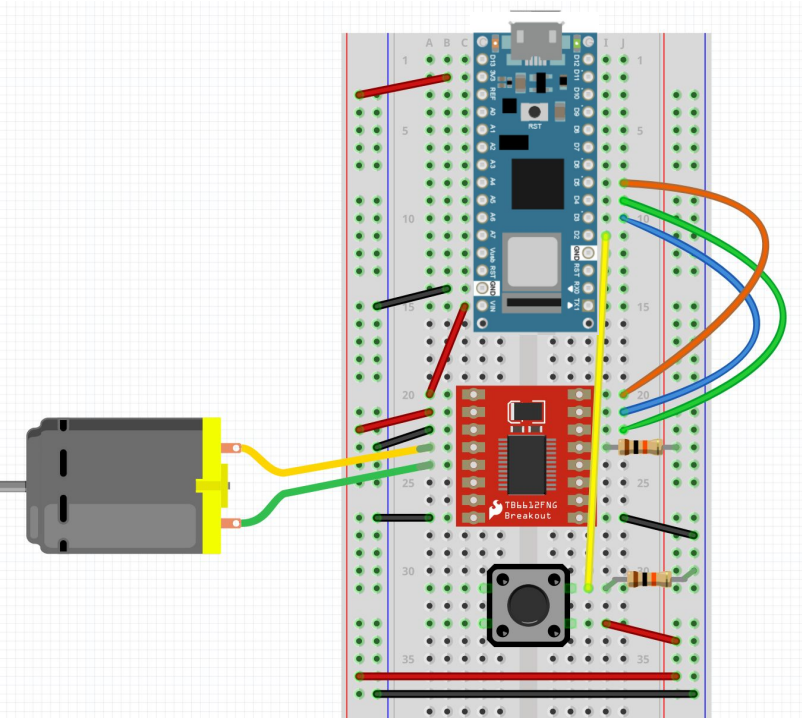
Start with the stupid motor

You will need:

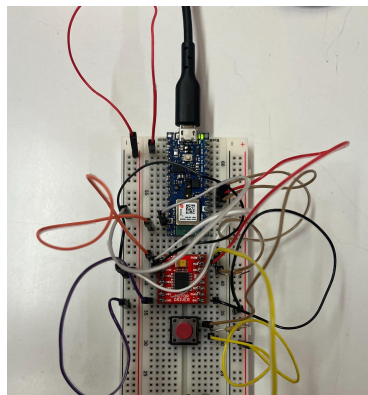
- an arduino
- usb cable
- bread board
- motor
- motor driver
- x2 10k ohm resistors
- button
- jumper wires

Start with the Stupid Motor

1. Make this



(it might actually look more like this...)



How to draw an owl

1.



2.



1. Draw some circles

2. Draw the rest of the fucking owl

2. Copy this code into your Arduino IDE:

[Example 01 Stupid Motor](#)

And then hit upload



Stupid Motor continued

What happens when you push the button?! The **direction** of the motor changes!

You can change the direction and speed of the motor using the motor driver. The truth table below shows how the motor driver works.

AI1	AI2	PWMA	Effect
H	L	H	Motor turns one direction
L	H	H	Motor turns the other direction
L	L	–	Motor stop
H	H	–	Motor stop
–	–	L	Motor stop

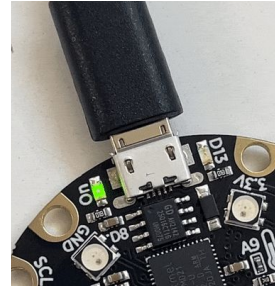
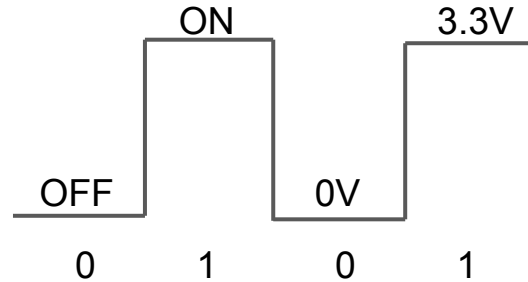
You can change the **speed** of the motor by changing the number on the PWM pin.

```
// set PWM enable pin high so that motor can turn on.  
// To change the motor speed, change the number in the line of code below  
analogWrite(pwmPin, 100); // 255 is full speed, 0 is off
```


Stupid Blink

You don't even need a circuit for this one! **Don't need to change anything on your breadboard**

Copy code from [Example 02 Stupid Blink](#) into the IDE and upload to Arduino

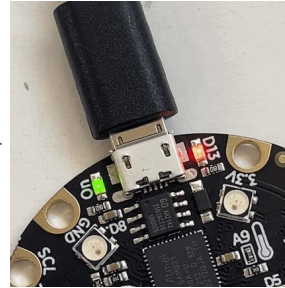
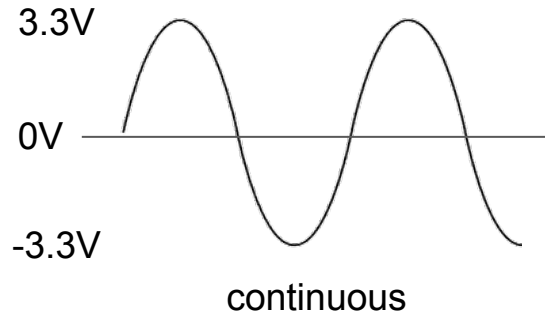


DIGITAL

Stupid Fade

Again, no circuit needed! Don't need to change anything on your breadboard

Copy code from [Example 03 Stupid Fade](#) into the IDE and upload to Arduino

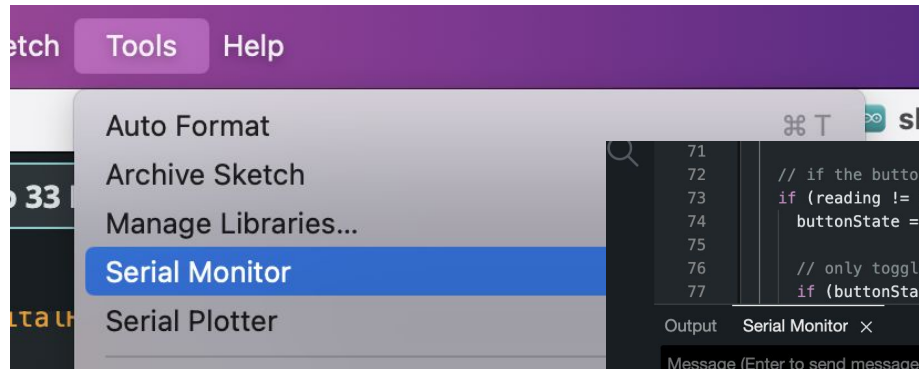


ANALOG

Button with serial print

Don't need to change anything on your breadboard!

Copy code from [Example 04 Stupid Button](#) into the IDE and upload to Arduino



Resources

[https://github.com/makin-stuff/Stupid Arduino for Blinkers](https://github.com/makin-stuff/Stupid_Arduino_for_Blinkers)

Motor Lab:

<https://itp.nyu.edu/physcomp/labs/motors-and-transistors/dc-motor-control-using-an-h-bridge/>

Button:

<https://docs.arduino.cc/built-in-examples/digital/Button/>