Left Sidebar

Let’s tweak the LEDs one by one to get custom patterns

Overview

Editing our motor tweak code

Difficulty rating: 4

Fun Rating: 4

Time taken: 25 mins

Supporting activity - Motor Tweaking

LED Tweaking

Get manual control over all the LEDs and be able to tweak them individually using the dial.



Let’s adapt our motor tweaking code to tweak each LED individually...

**Editing our motor Tweak code**

This is very simple, let’s simply replace the motor code with LED code...

int newButtonState = LOW;

int oldButtonState = LOW;

int numberOfPresses = 0;

int LEDnumber = 0;

int dial;

long color;

void setup() {

QuadBot.begin();

}

void loop() {

newButtonState = QuadBot.readButton(); //Read the value of button

if (newButtonState != oldButtonState) { //If the button is different to its previous value…

if(newButtonState == LOW){ //If the button has just been pressed, the value should be LOW

numberOfPresses++; //Increment the number of presses

}

}

delay(50);

oldButtonState = newButtonstate; //Assign the current button state to be the old button state for the next loop.

LEDnumber = numberOfPresses%8 //Take the modulo 8 of numberOfPresses

dial = map(QuadBot.readDial(),0,1023,0,255);

color = colorWheel(dial);

QuadBot.writeLED(LEDnumber, angle); //Set the angle of the motor to the mapped dial value

}

And that’s it, the same as before but now with LEDs

**Conclusion**

Very simple, let’s move on!