

Stroboscope

Code Club Challenge – 01-06

Setup:

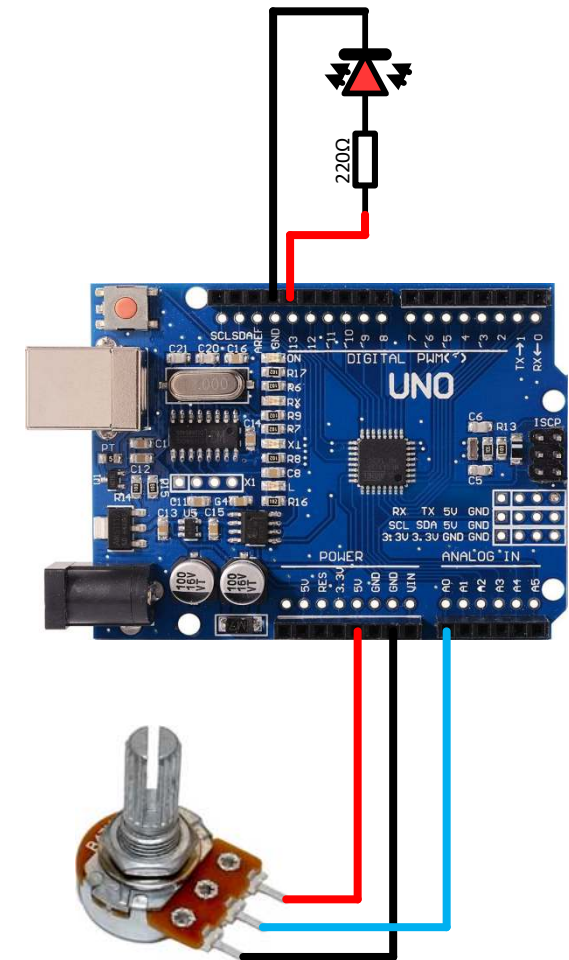
- Building on the tutorial at <https://www.arduino.cc/en/Tutorial/ReadAnalogVoltage>
- Connect an LED and series resistor between ground and pin 13

Code Challenge:

- Write code to demonstrate a stroboscope function based on this pseudo code:
 - Read pot value
 - Map pot value to Offtime delay (0 == 100, 1023 == 10)
 - Turn LED ON for 10 milliseconds
 - Turn LED OFF for Offtime milliseconds
 - Repeat
- The Off time delay should vary between 10 – 100 milliseconds
- Remember to define variables, and pins in setup()
- Show your understanding of your code by explaining it to your teacher

Can you:

- Determine the frequency at which the LED no longer appears to flicker?
- Explain why the LED appears to get brighter at higher flash rates?
- Give examples of real life applications of using a stroboscope?
- How would you need to modify the circuit for practical use?



WARNING!

Always disconnect power before making/changing circuit connections